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IN THIS ISSUE

Roots for Tomorrow's Progress

- *How to Keep Real Wages on the Up-Trend*
- *Research Microscope on Executive Behavior*
- *Dynamic Plan for Harmony and Full Production*
- *The Significance of Macro-economics*
- *Scientific Management and the Government*
- *Personality Tests in Industry*

VOL. XV, NO. 11

NOVEMBER 1950

Barren Victories and Big Little Things

IT WAS MY pleasure some few weeks ago to have lunch with one of the Country's ablest pioneers in the field of Business Education, Dean Walter C. Weidler who has been head of the Ohio State College of Commerce since 1929. As we sat talking I was most interested in hearing the story of the early beginnings of the College and how it had grown to its present position among the recognized leaders in the Country. I was also quite impressed with the philosophy which the Dean expressed. He said, "If I should ever write my memoirs, which I shall of course never do, I am sure of the titles of two of the chapters. One would be titled "*Barren Victories*" and the other "*Big Little Things.*"

The first of these ideas can only have full meaning to one who has experienced just such a victory. To someone who has lived for a cause or an idea, who has, in a sense, almost died for it, only to find when the point was finally won that he would have been better off if he had not won —that indeed is a "barren victory."

An argument won at the expense of a friendship, for example—could any argument be more costly? Not one of us can afford to lose a friend. A review of the arguments we have won in business, the prices we have paid for the results attained will give new appreciation of the significance of "barren victories" and should be an invaluable guide to action for the future. *Every victory has its price.* The wise man is he who can accurately estimate the price and then decide whether or not he wishes to pay —whether or not he will get "value received."

Let me make one thing very clear. Neither the Dean, nor I would for one minute want to leave the impression that one should stay out of trouble at all times. It has often been said most correctly that the man who does nothing stays out of trouble. On the other hand, let someone do something worthwhile, assume some position of leadership and he at once becomes a target. I am all for the man who believes in something enough that he is willing to do battle to promote it, to develop it, or to defend it. I have little regard for the man who tries to be all things to all people. Who is not willing to define his position because if he does there will be someone who will not like the position he has taken—and he does not want to displease *anyone.* He is not willing to come to grips with the issue because he does not want to pay *any* price at *any* time. Such a man in my book is not possessed of mental integrity. Perhaps one of the things that is wrong with us and with our world today is the fact that too many of us are unwilling to define our position after careful and prayerful thought, subject our definition to careful and continuous analysis and—so long as we believe in that position—to do everything we can that is morally and ethically justified to promote that idea, point of view, or way of life—whatever it may be.

There is another side to the story. We must have firm opinions based on logical and careful analysis and subject to continuous review in the light of changing circumstances but we must be careful not to become so devoted to the cause of perfectionism that we become obstructionists. It is a very difficult matter to decide when an issue, a point of view or an argument is worth our full effort to promote, to defend, or to defeat. Is the issue vital to the ultimate objective which we have in mind? This is a decision which the executive must make, over and over again. Somehow he should try, difficult as it will be, to keep score. He should determine how many times he supports the other fellow's idea, how many times he opposes it. When he supports it, is he always in complete agreement with the idea and plan as presented? The chances are that very rarely will he agree one hundred percent. If he doesn't agree one hundred percent with the concept or plan what should he do? Should he oppose the idea? Should he support the idea but state his reservations? Should he support the idea without reservations? How many times is he *for*—how many times *against?* Over a reasonably long period of time he should strike some kind of a balance. This does not mean that he should come out with an end result of 50-50. If he did he would not be a leader, nor would he be a good executive. An effective leader would have positive ideas and would lead more often than follow—however the good leader would certainly find himself in agreement with other's ideas and plans a substantial number of times.

SO THERE ARE two extremes about which we have talked. The man who wants to please everyone by doing nothing, by not defining his position so that no one can criticize him, and—on the other hand—there is the man who is so definitive, so much a perfectionist that he cannot go along with an idea unless it is one hundred percent in line with his own thinking. The balance which represents the successful executive lies somewhere in between.

All of this relates very closely to the Dean's concept of "*Big Little Things*"——

> "Very important things, i.e. big things which are seemingly little and inconsequential. They seem little to the uninitiated and to those who see only a segment of the problem. In many cases the seemingly little things derive their importance because those in definitive positions are very busy, and hence do not have the time, the disposition or the perspective to appraise things in terms of their relative values".

How do we determine the size, the scope, the importance of a thing, an idea or a concept? What is a big thing? What is a little thing? Who is to say? It is a matter for individual determination, is it not? The problem is in its essence quite simple. It resolves itself down to this—Ours is a society founded on an intricate network of human relationships. Every act which we perform, every idea or thought positive or negative, which we express will have some reaction on some one or more persons—positive, negative or neutral. The success of any executive or other leader is founded on his ability to influence others. This he does through his actions and his expressions. He must be able to see "big little things" as others will see them. He must be able to estimate the price of victory and weigh possible victory against the price. This ability is prerequisite to executive leadership.

DILLARD E. BIRD

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Advanced Management

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CONTENTS

Editorial ..... inside front cover
by Dillard E. Bird

Work Together for Full Production 2
by Frank W. Abrams

Reorganization's Progress 5
by Ivan Asay

Real Wages: A Yardstick of Progress 8
by William A. Patterson

Leadership Aspects of Administrative Behavior 12
by Carroll L. Shartle

The Industrial Use of Personality Tests 16
by William E. Henry and Harriet Bruce Moore

Overall vs. Individual Enterprise Approach to Economic Problems 21
by Raymond T. Bowman

Management Bookshelf 25
Reviews by Russel F. Hurst, Marie P. Sealy, Julius C. G. Seidl, and others

Society News 26

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"We have demonstrated in the past, and will demonstrate again if need be, a tremendous capacity to manufacture the things necessary for military success."

Work Together For Full Production

By FRANK W. ABRAMS

Chairman of the Board,
Standard Oil Company, New Jersey

Outlining a program and a philosophy for encouraging diverse groups to consider areas of mutual agreement.

EXACTLY WHAT DOES the term "full production" mean? Right now, the word is perhaps most readily associated with war production. Turning out weapons is a big and vital job. We have demonstrated in the past, and will demonstrate again if need be, a tremendous capacity to manufacture the things necessary for military success.

But I am sure that we are thinking—at least we should be—about something a good deal broader than the production of arms. Of course, if we do not produce adequately for defense, any discussion of the deeper meanings of production is likely to be only academic. But while producing weapons may be the way to win a war, it is not the way to win a peace. What counts is producing the materials of peace—and the attitudes of peace as well.

If we try to find some simple measurement for the term full production, memory may bring up the old political slogan, "the full dinner pail," or, from a somewhat later period, "a chicken in every pot"; or, later still, "two cars in every garage".

Younger folks, who may not recall those slogans, might translate "full production" as: "security from the cradle to the grave". And I suppose that if we wanted to bring that most recent slogan entirely up-to-date, we'd have to add, "with a television set in every home".

So we find that "full production," when measured by material things, is a relative notion. It is a goal that isn't easy to define exactly—it is a moving target.

VALUES FOR FULL LIFE

Yet material things, important as they are, cannot provide a complete description of "full production". We must take into account not only the tangible but the intangible — not only material but spiritual values. We must think in terms of producing a way of life — a *full* and satisfying way of life, and that means much more than material things.

Full production involves the whole range of human satisfactions and contentments. We cannot be satisfied with less.

Men want the esteem of their fellow men. Material well-being without this satisfaction is meaningless. Men want freedom to develop culturally and to express themselves spiritually. They want the opportunity to improve themselves by their own efforts — in part because they are driven by the hope of individual gain, but also because of the inward satisfactions that go with personal achievement. They want to feel they are playing a part in building something significant; important and lasting — a finer country and life for themselves, their families and their neighbors. These, it seems to me, are fundamental wants of the great majority of men.

Let us also put it down as the hard core of reality that, regardless of the physical environment and social structure at any particular time, men are constantly reaching out for something better — materially, culturally, and spiritually. There is no ceiling on our hopes and ambitions. For that reason alone it would be difficult to say when production had reached the point of fulfillment. Everyone who has a stake in American business—and that includes all of us as investors, employers, employees, or consumers — can be profoundly thankful for this compelling drive within men. It is the power behind the dynamic development of America.

Full production thus has a dual meaning. It means not only a high level of material well-being. It means the enjoyment of cultural and spiritual contentment as well. It can be obtained only by the coordinated efforts of men and women working consciously for its achievement.

How can we most effectively work together for both material and spiritual ends?

WAYS TO COORDINATION

Now apart from the adjustments that result from competitive forces, coordinated effort in this complex world of ours can be achieved in either of two ways — by voluntary cooperation, or by compulsion. In my judgment, "full production" in the broad sense can be achieved only by *voluntary* cooperation. Production obtained by compulsion cannot be full production in the broadest meaning of that term. At best it can result only in material things—and not a full measure of those. Most important, it cannot produce cultural satisfactions and spiritual contentment. Only voluntary cooperation can do that.

Differences in the methods used to obtain coordinated effort, it seems to me, are the root distinctions among the major economic systems in the world today. As I see it, communism obtains coordination by dictation and coercion —by the whips of slave-labor camps— by ringing a factory with machine gunners—by withholding food-ration cards from those who argue or hold back. Socialism obtains coordination by the coercive force of the government, by exalting the state and subordinating the individual. Our form of government has always recognized certain inalienable rights of individuals and minority groups. Our form of democratic capitalism seeks coordination by the more difficult methods of bargaining, conciliation and conference. Although these methods no doubt appear awkward and inefficient to our ideological competitors, the results will continue to be more satisfactory and enduring—of that I am sure.

The whole growth of the democratic way of life, in fact, has resulted from the discovery and development of more and more devices for successful, voluntary cooperation.

As a businessman, I am particularly conscious of the extent to which the modern corporation is an example of coordination through cooperation. No one man, nor a hundred, could build and operate the vast and intricate plants which turn out our automobiles, electric generators, farming machines — or that popular fuel, gasoline. To make and distribute these products, as well as thousands of others, requires the effort of investors, engineers, scientists, management experts, and workers skilled in hundreds of different crafts. The modern corporation, bringing together the activity of these tens of thousands of individuals, is, in my estimation, a remarkable cooperative device.

Though we have achieved a high degree of cooperation by our methods, I suggest it is important that we obtain much more. We do not yet have sufficient cooperation, particularly in the relationships among groups, to obtain the kind of "full production" we are capable of reaching. To progress from where we now are, we must seek and develop the possibilities for various groups of the American people to work toward reconciliation of their interests for their mutual good and the national welfare.

INDIVIDUAL AND MUTUAL INTERESTS

Most groups on the national scene are organized to promote their individual interests. Some are strong and effective —others weak and ineffective. There is labor, represented by organizations such as the AFL and the CIO; business and industry, represented by the U. S. Chamber of Commerce, the NAM and others; agriculture, represented by such bodies as the National Grange and the American Farm Bureau Federation. Education, the churches, and many other interests have their organizations. Some groups, the American investor, for example, have little or no organization of importance.

The national Government, administered by one or the other of the two dominant political parties, seeks the support of the strongest groups to maintain itself in power. I cite this not as criticism, but as a fact of political life. The result, however, is that as some of these groups grow in relative strength, government has less motivation to balance their respective claims. It tends to become identified with the "interests" which support it and thereby loses its detachment. Without some sensible measure of detachment, no government of any party can truly "promote the general welfare."

The efforts of minority groups are too often geared to their own interests. All

"Our democratic capitalism seeks coordination by the more difficult methods of bargaining, conciliation, and conference."

are engaged in trying to "sell" the idea that their particular cause is not only just, but is of over-riding importance to the national welfare. One group speaks of "those selfish interests" and warns of fascism; another talks of "free enterprise" and warns of communism. The general public, however—which all seek to win—has mutual interests with each of these groups and with others as well.

If our country is to exercise an effective leadership in world affairs, we must be able to prove continually, by example, that we can not only solve our problems here at home—many of them problems that also beset peoples elsewhere—but that we can also seize our opportunities and move continually toward the greater fulfillment of men's aspirations. Certainly disunity at home, expressing itself in the clash of group interests, cannot contribute to the ultimate solution of world problems. I think it is important, above all other needs of our time, that additional ways be found to encourage the bringing together of discordant groups for voluntary cooperative action. There are evidences here and there that small starts have been made, but the times are too perilous for timid action.

This is a job that needs to be done outside of government. Let's quit leaning on our national government and awaiting so-called "fact-finding boards" to solve or confuse our problems. Let's stop relying on government action to force on us either the restraints, or the concern for our fellowman, which a mature, responsible member of a free society should voluntarily impose on himself.

TOWARDS RECOGNITION OF MUTUAL INTERESTS

My faith in America includes the conviction that there is this kind of maturity at the grass roots in the communities of our country. So let's begin at the grass roots, with people of good will of all public groups—first at the local and eventually, perhaps, at the national level — meeting together to become better acquainted and to discover the basic mutuality of the interests of every American.

In the community the initiative for this could come from almost any group —a church, a grange, a university, or a union, for example. I would like to suggest that a start might be made by business and industry extending a cordial invitation to agriculture and labor to take part in the programs of their association meetings, such as those of the local *Chambers of Commerce*. These organizations seem particularly well situated to bring together groups that have interests requiring conciliation and agreement. If such an experiment could be made to work at the local level, out of the experience might come the formation of what I will call "*The Congress of the American Economy*" to have representation from all organized groups and to meet annually for purposes of national unity.

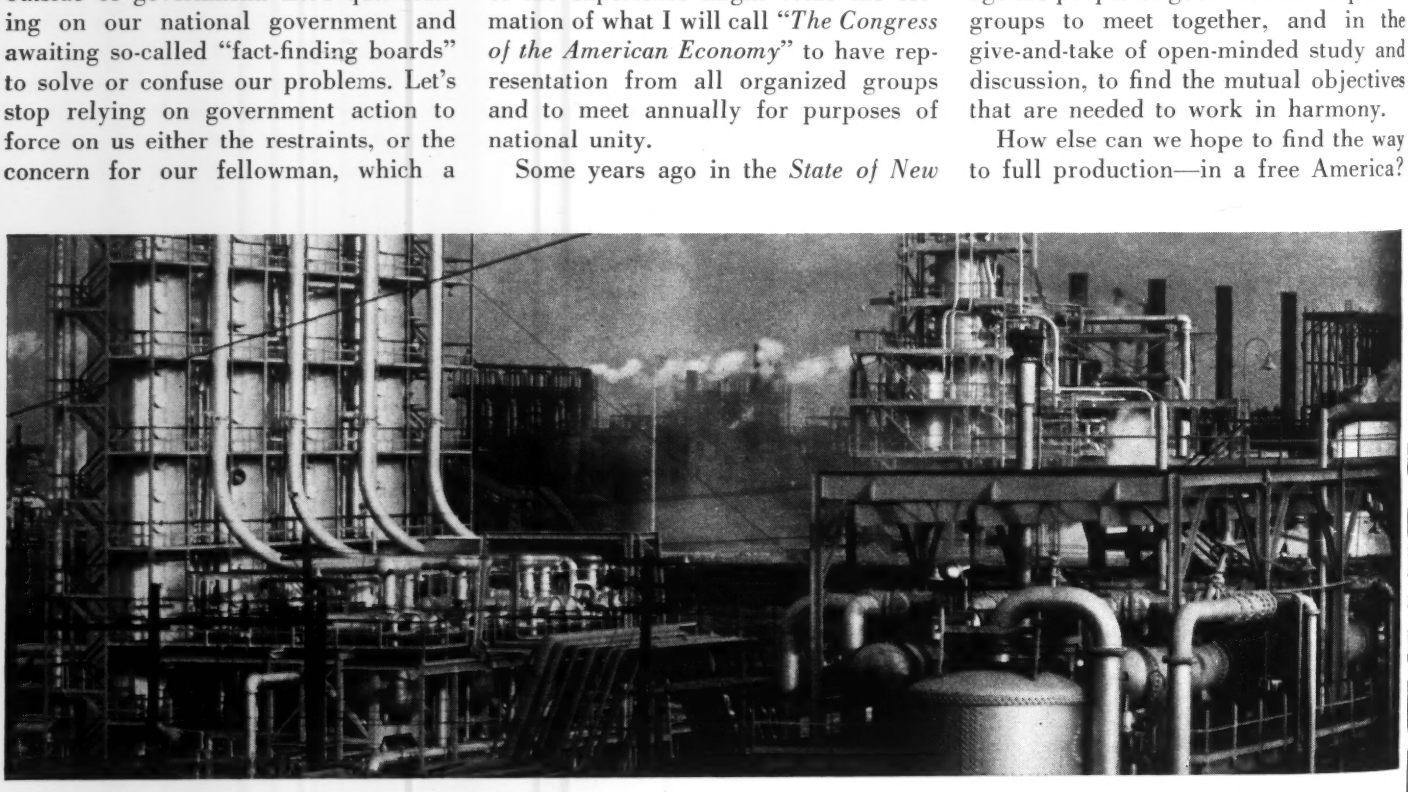
Some years ago in the *State of New Jersey* I saw this sort of experiment tried on the local level by the *Chamber of Commerce*, with considerable success.

DISCOVERING VITAL OBJECTIVES

As an agenda for the initial grass-roots meetings, I offer some fundamental propositions which, I think, could be agreed to at the outset. One is that, as a people, we can have more only by producing more. This is the direct opposite of the notion, which seems to be growing more popular in some circles of our society, that to have more, one group must gain at the expense of another. There must be a greater production to divide if we are going to have higher living standards. Another fundamental proposition is that the total of production available to support a rising standard of living for everyone, depends importantly on how much capital we have, and on how effectively we use it—and that it takes profits and savings to build that capital. Finally, it is well to recall that those who receive more than they produce, do so only at the expense of those who produce more than they receive. These facts are elementary.

With this sort of basis, we can begin the reconstruction of mutual respect—then of faith in each other. Let's encourage the people of good will of all public groups to meet together, and in the give-and-take of open-minded study and discussion, to find the mutual objectives that are needed to work in harmony.

How else can we hope to find the way to full production—in a free America?



"No one man, nor a hundred could build and operate the vast and intricate plants which turn out our automobiles, electric generators, farming machines, and other mass production items."

Reorganization's Progress

By IVAN ASAY

Chief General Methods Branch, U. S. Public Health Service

A progress report on the application of scientific management principles to the vital problem of improved administration of the Executive Branch of the Government.

THIS IS A good time to take stock of what has been accomplished during the first year since release of the *Report of the Commission on Organization of the Executive Branch of the Government*, better known as the *Hoover Commission*. Every business, every labor organization, every public servant, and every citizen has a stake in these developments. With the creeping emergency putting a strain on resources, the importance of good management is magnified.

The record, on the whole, is encouraging. We have seen the adoption of fully half of the program proposed by the *Hoover Commission*. This achievement has resulted from the combined efforts of both parties in Congress, the President, and the executive agencies. Much remains to be done but, even now, we are a great deal better equipped for vigorous and orderly action in an emergency than we were in the days before and after Pearl Harbor.

REORGANIZATION PLANS

Under the Reorganization Act of 1949, empowering the President to adopt administrative revisions, subject to veto by either house of Congress, 26 plans have been put into effect out of 34 submitted. The main purposes of these were (1) to improve the central administration of the executive branch, (2) to strengthen lines of executive responsibility, and (3) to reassign functions among agencies according to major purpose. The accompanying charts prepared by the *Bureau of the Budget*, give a sample of the changes.*

NEW LEGISLATION

More than a dozen new laws were enacted during the two sessions of the *Eighty-first Congress* embodying recommendations of the *Hoover Commission*. Eight major achievements growing out of this legislation have been listed by the *Citizens Committee for Reorganization of the Executive Branch of the Government*.[1] These steps towards better management are outlined below.

The Reorganization Act of 1949 provided for specific reorganizations by administrative action in place of depending wholly on the more cumbersome legislative machinery.

**These charts are from "Management Notes" issued under the guidance of an inter-agency committee by the Bureau of the Budget, as part of its responsibility to "provide an interchange of information on effective management techniques". These "Notes" are one evidence of a significant increase in top management leadership toward improved administration of the Federal Service.*

[1]The fact that a large organization of leading citizens — popularly known as the *Citizen's Committee for the Hoover Report* — has stimulated public interest and vigorously lobbied on Capitol Hill in favor of reorganization has been unique. It has had much to do with the momentum which kept the Hoover proposals from being merely a report on the shelf.

Eberstadt Task Force Report

"Victory by bankruptcy may be the Machiavellian aim of the Kremlin. . . . **Burdens such as we are now bearing, if substantially increased, might become intolerable. . . . The premium on economy, therefore, becomes higher than ever before in history."**

Signatories of this statement included: ***Raymond B. Allen, Hanson W. Baldwin, Chester I. Barnard, John J. McCloy, Robert P. Patterson, Gen. Robert E. Wood*** **and such military advisors as** ***General James H. Doolittle, General Dwight D. Eisenhower, Mrs. O. C. Hobby, Admiral Ernest J. King, Admiral Ben Moreell, Admiral Chester I. Nimitz,*** **and** ***General Carl A. Spaatz.***

The Presidential "time-saver" law (HR 5526) relieves the President of the legal obligation of signing minor documents. It is estimated this will save as much as two working weeks of the Presidential time each year.

The new General Services Administration was established to handle federal supply, buildings, records, and other administrative services. Three agencies were consolidated and related activities previously scattered among several others were brought together. A basis for modern management of civilian supply and allied services for Federal agencies is now provided.

Rebuilding of the Labor Department, which previously had been "denuded" of many of its logical functions, has been accomplished by a series of reorganization plans. Transferred into this Cabinet Department were the Bureau of Employment Security, the Bureau of Employees' Compensation and various labor standards functions. The functions of subordinate officers were centered in the Secretary of Labor and he was authorized to delegate them and to have an Administrative Assistant Secretary.

Budgeting and accounting are being modernized. The performance type budget is giving a more straight-forward and manageable picture of the what and why of requested appropriations. The

Budgeting and Accounting Procedures Act makes a long stride forward out of an ancient past. It provides for a modern system of accounting based on uniform standards but allowing flexibility in application. It points toward riddance of mountains of paper work.

Streamlining of the State Department has at last been achieved under a law conferring broad power upon the Secretary of State to organize his Department and manage foreign affairs. This Department is now better equipped to play its tremendously important role in these critical times.

A more business-like Post Office Department has been partially inaugurated by administrative adjustments and by laws which lay the ground work for improved operating methods and accounting.

The Military Unification Act of 1949 is the most important of the eight great gains to date, according to the Citizen's Committee for the Hoover Report. General MacArthur recently commented that he has never seen such teamwork in the field among the Army, Navy and Air Force. We can be thankful of the progress toward real unification in the Department of Defense made just ahead of the Korean crisis.

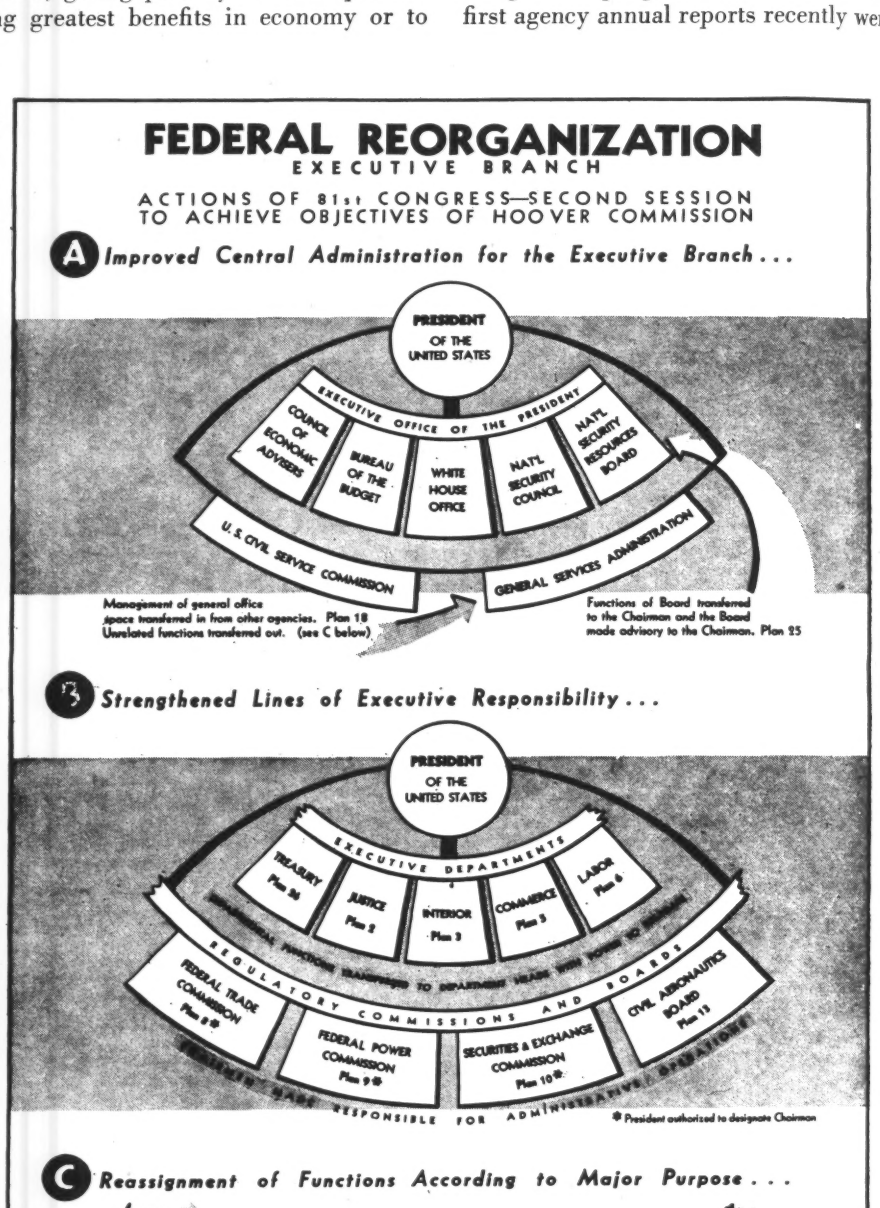
AGENCY MANAGEMENT IMPROVEMENT

Reorganization is no panacea. *The Hoover Commission* recognized this and the President took steps to get the departments themselves to working more intensively on self-improvement. Executive Order 10072, issued in July, 1949, instructed agency heads to (a) systematically appraise operations to determine how to improve performance, (b) schedule action to devise and install improvements, giving priority to those promising greatest benefits in economy or to better service for the same or less money, and (c) report to the *Bureau of the Budget* on progress and results. The first agency annual reports recently went

BATTLE AGAINST WASTE

"This is a time to take stock and tighten belts. We need, as never before, a well-organized, smoothly-operating, muscular government . . . EVERY DOLLAR WE WASTE IS A GIFT TO THE ENEMIES OF FREEDOM."

—ROBERT L. JOHNSON,
President, Temple University,
Chairman of the Citizen's Committee for the Hoover Report.


FEDERAL REORGANIZATION
EXECUTIVE BRANCH
ACTIONS OF 81st CONGRESS—SECOND SESSION
TO ACHIEVE OBJECTIVES OF HOOVER COMMISSION
A Improved Central Administration for the Executive Branch . . .
PRESIDENT OF THE UNITED STATES
EXECUTIVE OFFICE OF THE PRESIDENT
COUNCIL OF ECONOMIC ADVISERS
BUREAU OF THE BUDGET
WHITE HOUSE OFFICE
NAT'L SECURITY COUNCIL
NAT'L SECURITY RESOURCES BOARD
U. S. CIVIL SERVICE COMMISSION
GENERAL SERVICES ADMINISTRATION
Management of general office space transferred in from other agencies. Plan 18
Unrelated functions transferred out. (see C below)
Functions of Board transferred to the Chairman and the Board made advisory to the Chairman. Plan 25
B Strengthened Lines of Executive Responsibility . . .
PRESIDENT OF THE UNITED STATES
EXECUTIVE DEPARTMENTS
TREASURY Plan 26
JUSTICE Plan 2
INTERIOR Plan 3
COMMERCE Plan 5
LABOR Plan 6
REGULATORY COMMISSIONS AND BOARDS
FEDERAL TRADE COMMISSION Plan 8*
FEDERAL POWER COMMISSION Plan 9*
SECURITIES & EXCHANGE COMMISSION Plan 10*
CIVIL AERONAUTICS BOARD Plan 13
RESPONSIBLE FOR ADMINISTRATIVE OPERATIONS
* President authorized to designate Chairman
C Reassignment of Functions According to Major Purpose . . .
from
to
U. S. MARITIME COMMISSION
U. S. Maritime Commission placed in the Department of Commerce and re-organized under new Board and Administration Plan 21
DEPARTMENT OF COMMERCE
FEDERAL SECURITY AGENCY
Bureau of Employees Compensation Plan 19
VARIOUS FEDERAL AGENCIES
Coordination of Labor Standards Enforcement Plan 14
DEPARTMENT OF LABOR
Alaska and Virgin Islands Public Works Plan 15
DEPARTMENT OF THE INTERIOR
GENERAL SERVICES ADMINISTRATION
Aid to war crowded schools and water pollution control Plan 16
FEDERAL SECURITY AGENCY
Public Works advanced planning and War Public Works Plan 17
RECONSTRUCTION FINANCE CORPORATION
Federal National Mortgage Association Loans for pre-fabricated housing Plan 22 Plan 23
HOUSING AND HOME FINANCE AGENCY
DEPARTMENT OF STATE
Certain archival and records functions Plan 20
GENERAL SERVICES ADMINISTRATION
Executive Office of the President – Bureau of the Budget

SERVICE AND ECONOMY

"Reorganization of the executive branch of the Government has proved to be an item of major interest for all our citizens. The structure of our Government should be so designed and so framed that it can render maximum service for the American people within the constitutional guaranties. Efficiency and economy have been the watchwords of this meritorious program."

———WILLIAM L. DAWSON,
Chairman, Committee on Expenditures in the Executive Departments,
Congressman, State of Illinois

to the Bureau and a review of them shows evidence of considerable improvement compared to a few years ago.

To aid in this effort the President established an *Advisory Committee on Management Improvement*, including a dozen leading executives from industry and government.

Members of the Committee are:

- Thomas A. Morgan, Chairman, President of Sperry Corporation
- Lawrence A. Appley, President, American Management Association
- Vincent Burke, Deputy Postmaster General
- Oscar Chapman, Secretary of the Interior
- Gordon Clapp, Chairman, RVA
- Herbert Emmerich, Director, Public Admin. Clearing House
- Edward S. Mason, Dean, Harvard Graduate School of Public Administration
- Otto L. Nelson, Vice President, N. Y. Life Insurance Co.
- Frank Pace, Jr., Secretary of the Army
- James L. Palmer, President, Marshall Field Co.
- Marcellus Sheild, Retired, Staff Member of the House Appropriations Committee
- James E. Webb, Undersecretary of State

The group is said to have been very conscientious and constructive and to have found justification for President Truman's belief that Federal bureaucracy is capable of doing effective management. It is now paying special attention to advising on how, in light of the lessons of World War II and previous years, good management practices can be brought into present emergency planning.

Rather than continuing to focus upon improvement of going operations, the spotlight in management circles is turning upon problems stemming from the emergency—both its critical and long range aspects. Mobilization for defense and for ideological reconstruction to overcome threats of communism is in the forefront of attention, even though going programs have as yet felt little of the pinch of reconversion. Existing agencies are being used or adapted wherever possible rather than trying to set up a new emergency agency for each new task. Mr. Charles B. Stauffacher, Executive Assistant Director, Bureau of the Budget, recently stated that, "Washington is beginning this time with about the same organization as was finally evolved by the end of World War II."

JUST IN TIME

History may some day say that these steps toward better management — through executive, legislative and internal administrative action—come just in time. Soviet strategists who hoped for "victory by bankruptcy" can derive little comfort from such evidence of adaptability. American management strategists, taking heart from the progress made, can face up more confidently to the large task still remaining in structuring the Federal Government for still more effective and economical administration.

UNIFICATION AT WORK

"I do not believe that history records a comparable operation which excelled the speed and precision with which the *Eighth Army*, the *Far East Air Force*, and the *Seventh Fleet* have been deployed to a distant land for immediate commitment to major operations."

————*General Douglas MacArthur*, United Nations Commander in Korea and Supreme Commander of Allied Forces in the Pacific

A *Management Committee* in the *Defense Department* is implementing the Unification Act. In big ways and little, logistic operations are being speeded up and improved by a new spirit which spreads from generals and admirals to colonels and commanders, sergeants and petty officers, pfc's and able-bodied seamen.

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Real Wages: A Yardstick of Progress

By WILLIAM A. PATTERSON

President, United Air Lines, and Chairman, CED Subcommittee on *How to Raise Real Wages*

A dynamic answer to the challenge of maintaining and improving the pace of real income gains.

IN A TIME when a sardonic wit can define an optimist as a man who regards the future as uncertain—despite the A-bomb, it is comforting to measure the future against the past.

As one of the businessmen on the Research and Policy Committee of the Committee for Economic Development (CED), whose members do their own research in analyzing national issues instead of lending their names to the work of others—I recently completed a rigorous but stimulating examination of one yardstick of progress: real wages.

The subcommittee of which I was chairman was assigned to this question: how much progress has our economy made in terms of the average worker?

After a year and a half of arduous separation of fact from fallacy, of free discussion and debate among outstanding scholars and businessmen, our answer boiled down to this:

> "Allowing for changes in prices, an hour's work of an average employee today can buy more than three times as much in goods and services as an hour of work 50 years ago."

To put it statistically, the average employee in 1900 was receiving about 43 cents an hour in terms of 1949 prices. Fifty years later the figure was about $1.34 an hour, an increase of more than 300 per cent. And to restate for emphasis, that comparison is in terms of *real wages, or what money wages can buy.* This works out to a net improvement in purchasing power of approximately 2.5 per cent per manhour per year, despite the disruptive impacts of war, inflation, depression and all the other ills humanity inflicts upon itself.

These figures fall short of reflecting the actual increase in the standard of living of wage earners, of course. Walt Whitman made the point this way, 93 years ago:

> "Think of the numberless contrivances and inventions for our comfort and luxury which the last dozen years have brought forth—of our baths and ice houses and ice coolers—of our flytraps and mosquito nets—of house bells and marble mantles and sliding tables—of patent inkstands and baby jumpers—in a word give but a passing glance at the fat volume of Patent Office Reports and bless your stars that fate has cast your lot in the year of our Lord 1857."

Nor are the real-income gains which elude statistical measurement limited to the material aspects of life. Part of the gain has been taken in freedom from toil. The average work week in 1949 was 42.1 hours, nearly a third less than the 60.9 hours averaged at the turn of the century. Another indication of the improvement not adequately reflected by real wage figures alone is the fact that life expectancy is now 17 years greater than in 1900.

These findings cannot be interpreted to mean that poverty and hardship have been reduced to acceptable levels in the United States, but they do support the conclusion reached by CED's Research and Policy Committee in its statement on national policy, "*How to Raise Real Wages,*" that:

". . . the rise in earnings has been general and that, particularly in the last 15 years, small incomes have increased by considerably greater percentages than large incomes.

"It ought to be possible to raise real wages in the future as rapidly as in the past. This would mean that in slightly less than 30 years from now the real wages per hour of the average worker would have doubled."

MAINTAINING THE PACE

How was the three-fold increase in real wages since 1900 achieved? How can this rate be maintained or bettered?

The CED study found this answer for the first of these questions:

"The great increase in real wages during the last several generations has been made possible only by a large rise in production per manhour. Production, of course, includes all the operations required to get goods into the hands of final users. Consequently, it includes retailing and wholesaling quite as much as mining, manufacturing or transporting."

Our analysis showed output per manhour has increased at about the same average rate as real wages per hour, 2.5 per cent per year. In 1900 the average worker's output was worth about 51 cents an hour, in terms of 1949 dollars. The 1949 figure was $1.83, or about 3.6 times as great.

Why, it might be asked, did real wages increase only 3.1 times while output increased 3.6 times? Part of the difference may be charged to the fact that reliable statistics on output include all workers, self-employed as well as employees, but the principal cause of the disparity is the great increase in business taxes.

In 1949, about 24.7 cents of the $1.83 in output per manhour went to the government in the form of corporate income taxes and indirect business taxes. In 1900 business tax payments to government were about 1.2 cents of the worker's output of 51 cents an hour. Business taxes, in other words, took only 2.4 per cent of the output dollar in 1900 as against 12.4 per cent 50 years later. If the increase in this proportion is

taken into account, the rate of increase in manhour output is comparable to the rate of increase in real wages.

The great increase in output per manhour and the consequent rise in real wages since 1900 appear to stem from four primary factors:

1) Revolutionary and near-revolutionary developments in production methods and devices.

2) A substantial increase in capital (plant, equipment and material) per worker.

3) Important advances in the health, training and skill of the labor force.

4) Great improvements in management methods.

If these were the principal components of the rise in productivity during the last half century are they likely to continue to be? Is increasing productivity the only way to assure a continuing rise in real wages?

In the opinion of the businessmen who conducted CED's study, as well as that of the eminent scholars with whom they consulted, the answer to both questions is yes.

THE NATURE OF PROGRESS

A quick look at the present division of the national income will show that real wages of employees can't be increased materially by shifting income from the self-employed or from property owners.

The national income divides roughly into three parts, slightly less than two-thirds of it going to wage and salary earners, about a sixth to the self-employed and a little more than a sixth to owners of property in the form of corporate profits, interest or indebtedness and rental income.

Nor can the doubling of output and real wages per hour in the next 30 years —a goal which can be achieved by merely maintaining the past rate of increase—be based on any attempts to wring greater physical effort from employees. The average worker does a fair day's work. The instances of deliberate failure to produce as much as might properly be expected are not significant relative to the total effort.

Thus we must rely in the future, as in the past, on improvement in production methods, more capital, increased capability of workers and better management. A fifth factor, of increasing importance, will be the level of employees' interest in their work.

BASES OF OUTPUT

If future gains in productivity and real wages depend in the main on development in these areas, what are the prospects?

(1) *Improvements in production methods.* Even a haphazard recital of some of the basic changes in this field during the last 50 years will indicate its limitless scope and significance for the future. Most obvious is the substitution of mechanical energy for animal and human exertion. Industry's use of mechanical energy per manhour has increased seven-fold since 1900. Recall for a moment that 50 years ago the internal combustion engine was virtually unknown. Development of the Bessemer and open hearth processes in steelmaking, rotary printing presses, office machines, air transportation, of numberless other methods and devices in industry, agriculture, and distribution—in all forms of human enterprise—has proceeded at a rate so rapid as to outstrip concurrent analysis.

The press of competition among managements to anticipate and satisfy demands for new products and services has generated a phenomenal expansion of organized research. The implications for the future can be seen in the fact that expenditures on technological research, nine times as large in 1940 as they were in 1920, were doubled again between 1940 and 1949.

The willingness and ability of American enterprisers, manager and worker alike, to adjust to developing need and opportunity has been an enormous but incalculable stimulus. This has been exemplified most dramatically, perhaps, in the rapid replacement of equipment which is still usable but competitively obsolescent. This distinctively American tradition, incidentally, has been aptly named "novolescence" by Meyer Kestnbaum, Chairman of CED's Research and Policy Committee and President of Hart Schaffner & Marx.

(2) *More capital.* Today the average worker has available about $9,750 worth of material, equipment and plant to assist him in his work. This is the value, in 1949 prices, of all equipment, inventories and real estate improvements per worker—on the basis of original cost less depreciation. It represents not only privately-owned capital, but public capital such as roads and public buildings.

The significant thing here, relative to productivity and real wages is that capital per worker has increased about 37 per cent from the $7,140 level of 1900, when changes in price level are taken into account. This increase, and the consequent advance in technology, would not have been possible if the community had not invested about a tenth of its net national product for expanding plant, equipment and materials.

Whether the same ratio of saving and investment will be required to achieve similar gains in productivity and real wages in the future rests on variables too numerous to be dealt with here. But some things are clear:

(a) An increase in total capital will contribute to increased output per manhour and thus to real wages.

(b) Any large increase in capital can come only from a large amount of savings plus willingness to invest those savings, directly or indirectly.

(c) A substantial amount of such investment must be in new products and new methods which entail risk and the prospect of proportionate reward.

(d) The outlook for sufficient saving is favorable. The outlook for conditions which stimulate venture investment is less clear.

(3) *Increased capability of the workers.* It is undeniable that the American worker is healthier, more experienced and better trained than his counterpart of 1900. The shorter work week, with its reduction of fatigue, has added to manhour output. The steadily-rising proportion of skilled and semi-skilled persons in the labor force has also been important. To cite a few figures, the number of unskilled laborers dropped from 36 per cent of the labor force in 1910 to less than 26 per cent in 1940. In the same period the number of professional persons increased from 4.4 per cent to 6.5 per cent and clerical workers from 10.2 per cent to 17.2 per cent. The correlation between this advance and that in formal education is worth noting. The number of high school students, for instance, has increased 9.5 times as fast as the country's population

since 1850; the number of college students 3.5 times as fast. These proportions are increasing, as is the institution of special training courses within industry—not only for skilled and unskilled labor, but for technical and executive personnel.

(4) *Better management.* As the first three elements of productivity and real wages have expanded in scope and complexity, so has the role and responsibility of management. Constant development and review of organizational policy, structure and method has been required, not only to keep the pace but to set it. This is reflected in many things: the subdivision and delegation of executive effort through staff positions virtually unknown in the business world of 1900; the increasing attention to organized search for new products, new methods, new outlets; rapid improvements in devices and systems of developing, recording and communicating vital information and in procedures for making the countless decisions which bear directly or ultimately on productivity. Certainly, as the CED report put it, "the managers of 100 years ago would not have had the techniques and assistance necessary to administer enterprises which are as large as those in modern industry and which consume materials as rapidly."

Past progress in the field of management methods was largely self-generated. An accelerated rate of further progress may be expected, since business administration has become an important area of research—not only in the educational system, but among business associations and in business enterprises themselves.

Adding impetus is the increased awareness of management personnel that their responsibility to the community extends beyond mere success in blending men, money and materials. One index of this is the steady increase in public service on the part of business executives in recent years. Another is the greater recognition by modern management that employees' interest in their work is vital to the growth of the economy—and not in material values alone.

Those managements which have given direct and constant attention to stimulating and maintaining employees' interest in their work have counted many benefits, among them increase in efficiency and voluntary development of new ideas for boosting production, improving quality and cutting costs. A less measurable, but not less important benefit is the personal satisfaction any worker derives from the feeling that what he does is significant and appreciated.

PROGRAMS FOR THE FUTURE

The general outlook, then, for broadening and raising these four bases of output and real wages is good. We have come a long way from those widely-trumpeted opinions of 15 years ago that our economy was static and had over-reached its last frontiers.

But it is not enough to cite the outlook and let it rest there. The large, constantly-growing demands for more production make it imperative that active steps be taken to encourage increases in manhour output. The vast, unsatisfied needs of people for goods is the largest of these demands, of course. Another is the need for enlarging the support of those who are unable to work, primarily the disabled and the elderly. Still another is the heavy expenditure for national defense and military aid to other nations.

If the larger claims on the output of the nation's individual producers are to be met without halting or slowing the increase in their real wages, the rate of increase in output must be accelerated.

Among means to this end which the CED committee considered most promising are:

(1) *Stabilize the growth of industry and avoid serious business recessions.* The CED report pointed out that "the effect of the unusually severe and prolonged depression of the thirties upon productive capacity is roughly indicated by the fact that between 1919 and 1929 total equipment and real estate improvements in the United States (at cost less depreciation expressed in 1929 prices) increased from $177 billion to $228 billion, or about 28 per cent, whereas in the depression decade of the thirties, the increase was only from $228 billion to $236 billion, or less than 4 per cent." This is a problem to which CED constantly addresses itself. Policies which should contribute substantially to improving business stability have been recommended by CED's Research and Policy Committee in several Statements on National Policy, notably: *Monetary and Fiscal Policy for Greater Economic Stability* (1948); *Taxes and the Budget: A Program for Prosperity in a Free Economy* (1947), and *Toward More Production, More Jobs and More Freedom* (1945).

(2) *Reduce seasonal unemployment.* "One of the most promising ways of raising real wages is by reducing seasonal unemployment, thereby increasing the number of hours worked in the course of a year by the average employee . . . Many enterprises have done much to reduce the seasonality of operations, but the possibilities for further progress are great. This is a problem for which management must accept an increasing degree of responsibility."

(3) *Improve the quality of business births and reduce the infant mortality among business concerns.* "The progressiveness of the economy and the rate at which methods of production are improved depend in large measure upon the vigor of competition. The vigor of competition depends upon many conditions. One of these conditions is the number of new concerns that are trying to get started each year and the stiffness of competition that the new concerns are able to give the established ones . . . Several reforms in the corporate income tax would be particularly helpful to new businesses. One . . . would be to permit business losses to be carried forward five or six years . . . (another) would be elimination of the 'notch rate' in the corporate income tax . . ."

(4) *Reform the tax system to make risk-taking more attractive.* "Investments in new enterprises using more or less untried processes, bringing out new types of products, or trying to develop markets where there are not markets now are particularly useful because progress can be made only by that kind of experimentation . . . A tax system which artificially causes would-be investors to prefer safe investments discourages pioneering, makes the economy less progressive and therefore retards the rise in the standard of living. The present tax laws discourage individuals from investing in newly-established concerns."

(5) *Stimulate more rapid replacement of equipment.* "Nowhere is business so ready as in the United States to scrap equipment that is still usable but is less efficient than new equipment. Many plants in the United States, how-

ever, would be better off if they replaced equipment even more rapidly. In some cases failure to do this is attributable to lack of capital; in other cases, to inertia or lack of awareness of the savings that might be achieved. It is desirable that the income tax law permit more flexible arrangements in the rate at which new equipment is charged off. Such arrangements would encourage faster replacement, raise the productive capacity of industry and help to increase real wages."

(6) *Increase the imports of the United States relative to its exports.* ". . . although there are costs to raising imports relative to exports, there are greater costs involved in exporting more than is imported. An excess of exports means that the United States has less to consume and that real wages (and other incomes as well) have less purchasing power than they would have if every dollar of exports paid for a dollar of imports. An increase in imports, by reducing the need for foreign aid, would help to make possible reductions in tax rates and increased incomes after taxes. Moreover, unless our imports increase, U. S. exports will decline when foreign aid ends, thus reducing employment in our most productive industries."

(7) *Provide more employment opportunities for older people.* ". . . employment of more older persons who want jobs means more output and a higher standard of living for all . . . The proportion of older persons in the population is growing and will be considerably greater in twenty or thirty years than it is today. Consequently, it is becoming increasingly important that older persons who prefer work to retirement be given an opportunity to work. Otherwise the output of the economy will fall substantially short of its potential and the burden of supporting retired workers will be heavy . . . Management in many companies is making increased efforts to provide jobs for older workers. Increased attention should be paid to this problem."

(8) *Improve the incentives for efficiency among the rank and file of employees.* "The interest of tens of millions of employees in doing their best is bound to have an important effect on the output of industry. Consequently, it is important for managements and unions to be sure that employees have ample reason to be eager and interested . . . There is reason to believe that the spread of seniority rules in the last ten or fifteen years has seriously weakened incentives among the hourly-rated employees in many branches of industry . . . Workers are entitled to protection against favoritism and the abuse of discretion by supervisors. Nevertheless, management should retain the right to recognize ability and efficiency in making promotions among hourly-rated employees . . . In many plants incentives for efficiency could be improved by changes in methods of payment . . ."

(9) *Develop regular methods of drawing upon the knowledge and training of the labor force.* "As the work force becomes better educated and better trained, it becomes more capable of being a source of new ideas concerning ways of increasing production, improving quality and cutting costs. It is easy to overlook the contribution that can be made by eager and interested workers."

(10) *Abolish make-work rules and featherbedding.* "Fortunately, make-work rules have not become widespread in American industry and many unions are opposed to them. Nevertheless, they are serious in some industries . . . Rules that force the wasteful utilization of labor are a burden to the entire community because they reduce the output of goods. Unions would find it advantageous to agree to abolish present make-work rules in return for wage increase. The union members as a whole would be as well off and the community as a whole, including the workers in other industries, would be better off because the output of goods would be larger."

Implicit in this review of past progress and future possibilities is the fact that gains in productivity and real wages have not been—and are unlikely to be—automatic or evenly applied, particularly as to specific goods and services. For example, the average employees' real wage may not have risen as much with respect to housing as it has relative to transportation or other elements of his standard of living. On the average, nevertheless, an hour's work gives him more than three times the purchasing power his grandfather had—and the ceiling is not in sight.

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Leadership Aspects of Administrative Behavior

By CARROLL L. SHARTLE

Director, Personnel Research Board,
The Ohio State University

Evaluating the results of an unusual interdisciplinary research program in executive behavior.

ABOUT FOUR YEARS ago the *Personnel Research Board* of *The Ohio State University* took up the matter of studying executive behavior in higher-level positions. After a series of planning conferences, it was decided to emphasize the leadership aspects of occupational behavior. It appeared that those aspects were of high importance and were ones which would be of particular interest not only to industry but also to institutions of higher learning where, it is assumed, future leaders are receiving their education. Throughout the entire occupational hierarchy the matter of leadership and interpersonal relations seemed worthy of study, particularly if one were to begin his studies at the top levels of an organization where leadership should surely exist.

SEVERAL SCIENCES REQUIRED

The three social sciences we selected to carry the heaviest burdens in the research were economics, psychology, and sociology. We selected economics because it seemed that both the economic setting in which leadership occurs and the economic aspects of organizations are important for leadership research. Economics also has developed methodology with which facts are sought and interrelated. Psychology came into the picture because of the emphasis on the study of the individual and his behavior. Psychology in recent years, as we all know, has made considerable progress in research methodology. Sociology is certainly important, for one cannot study leadership without reference to the group and the social environment in which leadership is found. The research methodology in sociology has also made headway in recent years. Anthropology has had an influence in the program. For the present its role has been in the planning of research rather than in other steps.

You will notice that the historian has not been included. I suspect he will come in later. Certainly the evaluation of leadership has a time factor. Perhaps it is too early to evaluate a leader's performance during his life time. We may have made a mistake in not having a corps of historians work on the problem before we began the studies of living persons.

In setting up our research design we prepared a large chart which included definitions of terms and a diagram to illustrate the research design. The chart now serves as a research model or paradigm for the study of leadership.[1]

In addition to the writer the research staff includes: Associate Directors, Alvin E. Coons, Department of Economics; Ralph M. Stogdill, Department of Psychology; and Melvin Seeman, Department of Sociology; Project Director, John K. Hemphill, Department of Psychology.

Out of our discussions following a review of the literature and a number of exploratory studies, we seemed to accept the following approach to the study of leadership.

1. We rejected, for the time being at least, the trait approach to the study of leadership. *Stogdill*,[2] of our group, in his review of the literature in 1948 states:

   "The findings suggest that leadership is not a matter of passive status, or of the mere possession of some combination of traits. It appears rather to be a working relationship among members of a group, in which the leader acquires status through active participation and demonstration of his capacity for carrying cooperative tasks through to completion. . . Problems which appear to be in need of thorough investigation are those relating to factors which condition social participation, insight into situations, mood control, responsibility, and transferability of leadership from one situation to another. Answers to these questions seem basic not only to any adequate understanding of the personal qualifications of leaders, but also to any effective training for leadership."

2. We shall study leadership primarily in terms of the activity which takes place rather than in terms of what any of us consider "good" or "poor" leadership. We do not feel competent within the observed range of administrative behavior to say that this is good leadership and this is poor.

3. We must study leadership in relation to other phenomena. One cannot very profitably study a leader or leadership and only that. One must study leadership in a broad framework. Thus, the social and economic factors must be given attention to attain a fuller picture of the behavior of the individual.

LEADER AND GROUP BEHAVIOR

For this study we define a leader as an individual in a given office or position of apparently high influence potential.

Adapted from the Presidential Address, Division of Business and Industrial Psychology, American Psychological Association, September, 1950.

[1] Morris, Richard T. and Seeman, Melvin, "The Problem of Leadership: An Interdisciplinary Approach," *The American Journal of Sociology*, 1950, 56, No. 2, 149-155.

[2] Stogdill, Ralph M., "Personal Factors Associated with Leadership: A Survey of the Literature," *Journal of Psychology*, 1948, 25, 35-71.

Later on we may select persons on the basis of other definitions.

We began our studies in industry and the armed services, and took as our subjects persons in high office. Presidents, managers, vice presidents, superintendents, commanding officers, department heads and the like. Analyses were made of their activities by interview, observation, and questionnaire. We were interested in "what" they did and with whom they worked. Emphasis was placed on the description of activities without any attempt to appraise the quality of performance. We found that the various activities performed could be classified into categories and we received self-estimates of the percentage of time spent on these activities. The categories, which have been previously reported and defined, were as follows:[3]

1. Inspection of the Organization
2. Investigation and Research
3. Planning
4. Preparation of Procedures and Methods
5. Coordination
6. Evaluation
7. Interpretation of Plans and Procedures
8. Supervision of Technical Operations
9. Personnel Activities
10. Public Relations
11. Professional Consultation
12. Negotiations
13. Scheduling, Routing, and Dispatching
14. Technical and Professional Operations

A pattern was prepared for each executive showing the proportion of time spent on the various activities. It would seem that in an organization there are certain patterns of activity which go together for organizational effectiveness and harmonious working relationship. We have developed patterns for 600 executives and administrators in industry and the armed services. We also plan to compare patterns for persons who change positions. It is our hypothesis that an administrator probably takes his pattern with him when he moves to a new administrative post.

In studying what persons do in administrative and executive capacities, modifications of conventional job analysis techniques are necessary. An executive may smoke his pipe and look into space for a half hour. If one describes his activity as "pipe smoking," he may miss a description of the formulation of a plan for the purchase of a $2,000,000 building. Thus, we have relied more and more on self reports of activities. In fact, the descriptions become perceptions of job tasks as reported by the job holder.

A second kind of instrument we have developed for studying behavior is concerned with estimating the degree of responsibility, authority, and delegation practiced by the administrator. Scales have been prepared which are specific statements of behavior.[4] The items have been weighted so that a score can be given for responsibility, for authority, and for delegation. The scales seem to be useful in showing differences among executives.

A third approach to leader behavior has been an attempt to determine "how" the leader performs his role as contrasted to what activities he performs. We have developed a number of dimensions of leader behavior. In one study we collected 1800 specific statements of leader behavior. On the basis of our analysis of leader performance and what we considered important to know about it, we set up *a priori* nine dimensions of leader behavior. These were:

INITIATION
MEMBERSHIP
REPRESENTATION
INTEGRATION
ORGANIZATION
DOMINATION
COMMUNICATION
RECOGNITION
PRODUCTION

The items of behavior were reevaluated and the most suitable items were arranged according to the nine dimensions comprising a list of 150 items.

The leader behavior description was then given initially to 357 persons both leaders and group members.

We found that many of the dimensions of leader behavior were not unique and were highly related to each other. A factor analysis showed that we had perhaps three dimensions, or factors, rather than nine. These were:

1. A maintenance of membership factor—behavior that increases a leader's acceptability to the group. It is heavily loaded with low domination and high membership dimension.
2. Objective attainment—behavior high in the production and organization dimensions.
3. Group interaction facilitation—behavior or acts stressing the mechanics of effective interaction of group members. Loadings high were organization and communication.

Thus, our nine armchair dimensions when put to the empirical test, did not maintain their uniqueness as well as we had hoped. The leader behavior dimensions seem to stand out more distinctly, however, when applied on one type of administrative organization rather than a catholic sample.

We asked the respondents, after describing the leader, to give an overall rating of leadership quality. We found that eight of the nine dimension scores were related significantly to the overall evaluation when the subordinate did the describing and evaluating. However, when leaders described and evaluated themselves, the relations were significant for only four dimensions.

The subordinates associated good leadership with low domination, but with high amounts of all the other dimensions except production, which showed no significant relationship to evaluation.

The leaders who described themselves associated higher evaluations with integration, organization, and communications down.

In educational groups we found less domination, less representation, less organization, and less communications down reported than in other types of groups, particularly military and industrial.

One very interesting application of the leader behavior description is to compare the dimension scores of self-

[3] For definitions of the categories see: Shartle, Carroll L., "Leadership and Executive Performance," *Personnel*, 1949, 25, 370-380.

[4] Stogdill, Ralph M. and Shartle, Carroll L., "Methods for Determining Patterns of Leadership in an Organization Structure." *Journal of Applied Psychology*, 1948, 32, 286-291.

Browne, C. G., "Study of Executive Leadership in Business. I. The R, A, and D Scales," *Journal of Applied Psychology*, 1949, 33, No. 6, 521-526.

description with those of descriptions made by superiors and subordinates.

Another application is to have half of the subordinates describe a leader and the other half describe the ideal leader for that job. We believe the extent of discrepancy scores between the ideal person in the job and the actual person can give important clues for leadership training.

THE GROUP OR STAFF

The study of the leader himself is incomplete without a knowledge of the environment in which the leader performs. One kind of environment is the organization, or the group of which the leader is a part. A second kind of environment is the larger society or culture of which both the leader and his group are a part. Regarding the former type we have been very much interested in how to describe a group as objectively as possible. We have been using several methods:

1. Formal organization chart.
2. Sociometric ratings. With whom do the members of the organization work? This is sometimes called the informal organization or interpersonal chart.
3. Measures of group morale.
4. Group dimensions. What are the basic dimensions of the group or organization? How do groups differ in these dimensions?

Group dimensions, I believe, afford a very interesting approach to the study of an organization.

Hemphill and Westie,[5] of our staff, have recently published a method of describing groups which was based on an earlier study by *Hemphill,*[6] at the *University of Maryland.* They have reported definitions of 14 dimensions and have developed scales whereby a group can be described by its members or by outside observers.

The group dimensions are:

1. Autonomy	8. Permeability
2. Control	9. Polarization
3. Flexibility	10. Potency
4. Hedonic Tone	11. Size
5. Homogeneity	12. Stability
6. Intimacy	13. Stratification
7. Participation	14. Viscidity

[5] Hemphill, John K. and Westie, Charles M., "The Measurement of Group Dimensions," *Journal of Psychology,* 1950, 29, 325-342.

[6] Hemphill, John K., "Situational Factors in Leadership," Ohio State University, *Bureau of Educational Research Monographs,* No. 32, 1950, 136 pp.

The scales for describing the dimensions were developed from approximately 1100 items or statements. Items selected were those judged by experts as relative to the particular dimension and independent of all other dimensions.

The final set of items numbered 355. Each relevant item describing a group ask the respondent to indicate on a five-point scale how true he considered the item for the group. In general, the scales were quite satisfactory in regard to both reliability and relative independence of the various dimensions. They make it possible for any or all members of a group to indicate how they perceive their group. A profile for each staff or group can be made to show similarities and differences among organizations.

STATUS FACTORS

In regard to the broader cultural framework I should like to mention status attitudes and status perception. *Seeman,*[7] of our group, who has been exploring these sociological concepts, subscribes to the tenet that "leadership-followership patterns of a given institution are related to or are in part functions of the status systems and status ideologies which characterize the larger society in which the given institution functions." Status is defined as the relative position within a hierarchy.

In psychology I am sure we are aware that status differences affect behavior. The clerk responds to the president differently than to an assistant. If we define leadership in terms of influence, it is certainly important to observe the operation of status in these behavior patterns.

We have largely been measuring status position as the respondent sees himself in terms of occupational prestige and social position in the community. The respondent describes his occupational status, for example, by comparing it to other occupations in the *North-Hatt Scale.*[8]

For measuring status perceptions, items have been developed to which the subject responds in terms of a five-point scale. These items are not designed to measure attitudes, but rather the respondents' perception of the amount of status difference in society.

Another set of items attempts to get at the respondents' status attitudes, his preferences as to how much status difference there should be on a variety of hierarchies.

[7] Seeman, Melvin, "Some Status Correlates of Leaderhsip." Paper given in Chicago, July 11, 1950, at the Cooperative Conference for Administrative Officers of Public and Private Schools, sponsored by the University of Chicago and Northwestern University.

[8] *See* Logan Wilson and William L. Kolb, *Sociological Analysis.* New York: Harcourt, Brace and Company, 1949, Chapter 13.

INTERPRETING THE STUDIES

The following statements have been substantiated in one or more of the studies. and have not been found untrue in any of the research.

Leadership behavior can be described reliably and in such terms that behavior differences can be shown in quantitative terms.

Group or staff behavior can be described in quantitative terms reliably with dimensions which are quite independent of each other.

The fact that leader behavior and group behavior can be reliably described is encouraging for future investigations. One can approach problems descriptively without involving himself or his subjects in commitments concerning who's behavior or what behavior is good or poor. The investigator simply wishes descriptions of what takes place. The matter of criteria is taken up separately. Later, after patterns of dimensions have been related to various criteria, the descriptions can be used as tools in selection, training, transfer and other problems.

There are stereotypes of ideal leader behavior in organizational settings as perceived by group or staff members. The dimensions suggest the ideal leader is one who places few demands upon the person he leads, he does not interfere with their freedom, and he is a group member and "one of the boys." However, at the same time, he is perceived as ideally not a part of the group, as one who can do things for the group that the group cannot do, and as one who gets things done. There seems to be a basic conflict in our ideologies of leaders. We want persons in leadership roles, and yet we do not want to place limitations upon ourselves to submit to leadership.

In regard to group behavior stereotypes no doubt exist, but they are less pronounced than those of leader behavior. In other words, subordinates are much more agreed about what the

ideal leader should be than they are about what the ideal group should be.

Subordinates' descriptions of their leader are directly related to their evaluations of him. However, attitudes of relative goodness of groups are related less to the descriptions of the dimensions of groups. In other words, members of organizations seem to describe groups with less bias than they describe leaders. This may be related to the matter of stereotypes just mentioned.

Stereotypes present interesting problems in the study of human relations. Suppose we find that the stereotype of a "good" administrator or executive, as described by subordinates, turns out to be, according to other criteria, the less successful administrator. This can well be in some organizations, at least, and it may result in efforts to train staff members to see administrative behavior in a different light. On the other hand, one may attempt to train supervisory personnel to fit the stereotype. In training supervisory personnel and in inducting new staff members in an organization, both methods are used. But how much of each remains an unsolved question.

When a given administrator describes himself as a leader, this self-description is nearer to the subordinates' description of the *ideal* leader than it is to the description of him by his staff. In other words, the subordinates perceive him less in terms of their ideal than he perceives himself in terms of their ideal.

In a hierarchy an intermediate supervisor is described by his superior more like the descriptions of his subordinates than like the descriptions of himself. Thus, the superior and the subordinates are more in agreement regarding the description of the intermediate supervisor than is the supervisor agreed with his superior or his subordinates about his own behavior.

This means that administrators, in terms of our leader behavior dimensions, perceive themselves quite inaccurately if one uses their superiors' and subordinates' descriptions as criteria. It will be interesting to discover if there are other behavioral differences when one compares administrators who give more accurate descriptions with those who are at considerable variance with the descriptions of their superiors and subordinates. It will be interesting to note if other measures of social perception are related, and if certain kinds of training will produce significant changes in self perception. It will be very much worthwhile to discover what and how much change in administrative behavior will reflect significant changes in perceived behavior by superiors and subordinates.

We find that those leaders who delegate more authority tend to have assistants who in turn delegate more to their assistants. It appears that the granting of freedom for decision and action tends to result in a chain reaction down the line. If one assumes, and there is evidence for it, that the top person in the chain has the most influence in establishing and maintaining the degree of delegation down the line, it is obviously very important to know the behavior of the top person. It is also apparent that when one attempts through training or other means to change behavior within the chain, his results may be fruitless unless changes in behavior of the top person also occur.

Communications appear to be one of the most important factors in administrative behavior. Where more communications are reported present, there is less discrepancy between descriptions of the administrator and descriptions of ideal behavior as reported by subordinates. Communications are certainly procedures which can be studied, evaluated, and improved. Lack of communications may be one reason why administrators' self-descriptions are inaccurate when compared to descriptions by subordinates.

Status attitudes of an administrator are related to his leader behavior. In other words, how the administrator perceives the ordering of individuals in our society, and his attitudes toward that ordering, are related to certain phases of leader behavior as perceived by his subordinates.

This has important implications for the training of administrators and supervisors if one is to change leader behavior to make it more ideal in the eyes of subordinates. Technique training in so-called human relations skills appears inadequate without a concern for the broader social framework of our society. Thus the man who believes in wide differences in status in our society or vice versa may show limited progress in changing certain dimensions of his supervisory behavior so long as these status attitudes remain fixed. In other words, the training of administrators and supervisors in leader behavior must be examined much more broadly than we in psychology have been accustomed to do.

In this article I have attempted to present an approach to the study of leadership as an aspect of administrative behavior. The methods of investigation include the study of the individual, the study of the group or staff, and the study of the culture in which the individual and the staff are found. I have also attempted to present briefly some of the findings which may be relevant to certain problems of mutual interest.

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The Industrial Use of Personality Tests

By **WILLIAM E. HENRY**

Department of Psychology and the Committee on Human Development, University of Chicago

and **HARRIETT BRUCE MOORE**

Social Research, Inc.

Background and technique for developing usable pictures of many facets of personality.

Response to this picture usually reveals information about informal leadership, relations with colleagues, and the value placed on cooperative efforts.

PSYCHOLOGICAL STUDIES of people through personality tests are very much a phenomenon of our times, almost completely developed in the last twenty-five years. Stimulated by widespread industrial demand and facilitated by increasing scientific knowledge about people and their ways, the growth and refinement of these instruments has been extraordinary. Businesswise, the growth of population and of industrial wealth has not been matched by an increase in the number of industrial units—rather, these units have become larger and more impersonal, more systematized. More hierarchies have appeared within them and the relations between men and jobs become more complex. Concomitantly, the individual jobs have become less adaptable to the jobholder's needs and skills, less apparently integrated to the milieu of related jobs. It has been inevitable that the qualities of individual men who fill the jobs should become less visible to men in positions of leadership. In our large industries the *idea* of a bookkeeper is much clearer to management than the *man* who keeps the books, the word "salesman" more apt to bring to mind a persuasive, poised stereotype than a concrete man who sells. In other words, the end results of the jobs, units sold, books balanced, become the known quantities, while the men who carry out the jobs become anonymous.

But while the opportunities for observation of the qualities of men have been markedly reduced, the necessity for their observation and their relevance to successful job performance has not. In complex hierarchies the hiring of men must to a large extent rely upon second hand information and limited personal contact. The business leader is increasingly in need of techniques to aid him in getting closer to relevant personal qualities of the men he hires. He needs some systematic assistance in getting through the shell of intentionally or unintentionally misleading information which a job applicant presents.

DISCOVERING THE "WHOLE MAN"

Wherever it is used, the basic function of the personality test is to uncover the man, and to make him known to those who wish to deal with him. It is an important fact that these instruments, skillfully used, give much more than the knowledge gleaned in a casual acquaintance or even a neighborhood friendship; they can reveal patterns of behavior and motivations which only discerning and long continued observation would provide.

It is the technical responsibility of the personality instruments to reveal that which lies below the surface and which is less readily observable. This process of "unveiling" the hidden is by no means new, in no sense radical, information about men in jobs. Every person who supervises others develops, over a period of time, a broader view of the abilities, limitations, and basic attitudes of those he supervises. This broader picture not only contains new ideas that he had not observed during his initial acquaintance, but has to it a pattern that again often differs from his first conclusions. Each of us, in considering the behavior of our close friends, knows that much goes on that is not always stated, much is only implicit and never

directly discussed. This implicit knowledge about our close friends has one additional feature that is of the utmost relevance. It is that these underlying trends are the real sources of motivation, that without knowledge of these trends one would be at a loss to explain and to predict our friends' behavior. In employees, such implicit trends are hardly less important, nor less motivating of their behavior. Yet they are much harder to discover, since we see them less often and, more important, we see them upon formal and impersonal occasions. The revealing of these hidden trends in our employees could be as easily accomplished as in the case of our close friends—if we saw them in as many informal, intimate, personal situations, and over as long periods of time. But no executive or supervisor has the time to spend in such an endeavor. He must rely upon other methods of bringing such information to his attention. Most executives are eager for assistance in gaining this more comprehensive knowledge of their employees—providing they are sure the information they obtain will be relevant, useful, and in keeping with the dignity of each person to be seen to advantage and to have his good points weighed in his favor.

Because this technical process of "unveiling" was first used in studying the mentally ill, the aberrant, and the unhappy, it has been held in some disrepute by the normal and the well-functioning. Recently, however, psychologists have demonstrated that knowledge of human behavior can be fruitfully applied to the study of the normal, for the analysis and prediction of work energy and motives, persistence and level of vocational aspiration, qualities of judgment, acceptance of authority, use of power over others, emotional stability and the ability to work harmoniously with others. Recent experience shows that these instruments are useful when applied to the normal adult and reveal information vital to a consideration of hiring, placement and transfer.

REACTIONS REFLECT INNER FEELINGS

Personality tests are of many kinds and, depending upon their nature, serve somewhat different purposes. The tests referred to in this article might more properly be called "projective" tests. This term is descriptive of the psychological process thought to be operative when persons take the test. It refers to the fact that when persons are in highly ambiguous situations, they are prone to see in those situations, not necessarily what someone else would see, but rather a reflection of their own concerns and habitual ways of feeling and believing. The person preoccupied with his own ambition and worried about promotion, tends to imagine that each ambiguous situation has to do with this area. Such an employee, when called to the boss' office, and not being told why, is likely to feel that it may be his promotion or demotion that is to be discussed. The careless employee who feels guilty over his slipshod work tends, in similar situations, to feel that he will be reprimanded; the competent and successful employee may well feel that he will be praised or given additional responsibilities. Thus, each "projects," or sees in the situation, that which is really in himself, rather than only seeing the vagueness that is in the actual situation. The projective tests take advantage of this human tendency and provide a number of trial situations or tests, in which the individual reveals these concerns and habits which direct his thinking and motivate his behavior. Each of these tests is in a sense a miniature reality situation, the reaction to which is found to closely parallel the actual behavior in real job situations. One particular feature of the projective tests is that the Subject seldom is able consciously to censor his responses, or to select answers which he thinks will give a picture more favorable to him. These tests do not ask a person specific questions which he may consider and answer in a critical manner. Rather, they provide a number of highly ambiguous situations, represented in miniature form on cards or pictures, and ask the person to describe what is going on and to imagine what the outcome of the situation might be. It is found that under these circumstances, each performs the task required in a manner highly similar to his usual manner of approach to broader real life situations.

Projective tests are of use with those persons who have personality difficulties or who are giving trouble on the job. But they have their primary industrial utility in dealing with the routine problems of the selection, placement, and transfer of normal, well-functioning adults. Projective tests are useful to answer such questions as these: how ambitious is the prospective employee, will he be easy to work with, can he supervise others, will he withstand the demands of responsibility, can he hold up under pressure, will he stay with us, will he become restless and soon move on?

The question in setting up reserve or training groups is one of investment. Is the young person worth the risk of exerting considerable energy and money? Will he turn out, in a number of years, to be the kind of man we want? Selecting these younger men of promise is a gamble partly because the work skills and technical abilities desired in future jobs are not present at the time of selection. The selection question is not, does he have the skills necessary for the present job; but rather, will he, after training, have the necessary qualities? To a large extent, the answers to these questions are predictions and they must be based on such variables as persistence, ambition, adaptability, and the presence, in underdeveloped form, of the attributes that make for successful, responsible men. To a large extent, these are personality traits which the projective tests can assay. In this area their benefits are being increasingly recognized as the profits of better prediction.

PICTURING A PERSONALITY

The projective techniques are a supplement, rather than a substitution, for other proven industrial selecting techniques. They serve, as do all tests, only as aids to the considered judgment of the person who makes the decisions.

Projective tests are frequently used in conjunction with interviewing, which in itself it often highly developed and detailed. The value of projective tests in elaborated interviewing systems is that they reveal factors lying beyond the interviewer's observation, validating and modifying his impressions. Further, they give information which the test-subject cannot himself give in direct response, and which the interviewer could get only upon often repeated observation.

While there are several well-established projective personality tests available, the two most widely used are the Rorschach and the Thematic Apperception tests. The Rorschach is widely known as the "ink blot test," and has

been applied to a wide variety of industrial situations and used in research into selection and placement.

In industrial situations, these authors have used the Thematic Apperception Test of Dr. Henry Murray and their own projective test, built on the same principle. In these tests, the individual is asked to make up stories about each of a series of pictures, which suggest content relating to common life situations and human strivings. Nearly all the projective personality tests in industrial use can, with the aid of some special equipment, be administered to groups of people. Most are designed as individual tests, however, being administered to the subject by a skilled tester. The Henry-Moore Test of Thematic Production is so constructed that it may be self-administered, thus eliminating the necessity of special testers and increasing the applicability of the instrument.

From the responses to such tests, the psychologist obtains a picture of many facets of the personality. Intellectual level is apparent; motivations and goals can be described; energy, character, attitudes about people, and the meaning of work are revealed. The test also gives evidence about the stability of the man's ways, indicating whether he is rigidly set and hence breakable by crisis, flexible and adaptive but with a core that does not readily alter, or too malleable to be on his own without control by others.

The description of a person available from the "thematic" tests differs from other types in several ways. In comparison to the questionnaire or "objective" tests, it offers few or no scores, but instead a picture of the person in his actual behavior. Each of the abstract qualities is seen in its operating context. That is, intelligence is not merely summarized by a score, but is described in its actual operations of problem-solving. Energy level is not divorced from the competitive, or recreative, or professional situations in which the subject is energetic. This association of abstract considerations—judgment, ambition, conservatism, stamina, independence—with the conditions that effect their appearances in a particular person leads to the second difference between these tests and other types. The qualities examined are neither statically nor numerically measured but are seen in respect to each other, much as foreground and background, highlight and shadow in a picture. Relative strength and relative prominence can be described, in respect to the whole individual. Predictions of change are possible, since this psychological approach discloses, quite directly, the directions of the personality.

DIMENSIONS AND RELATIONSHIPS

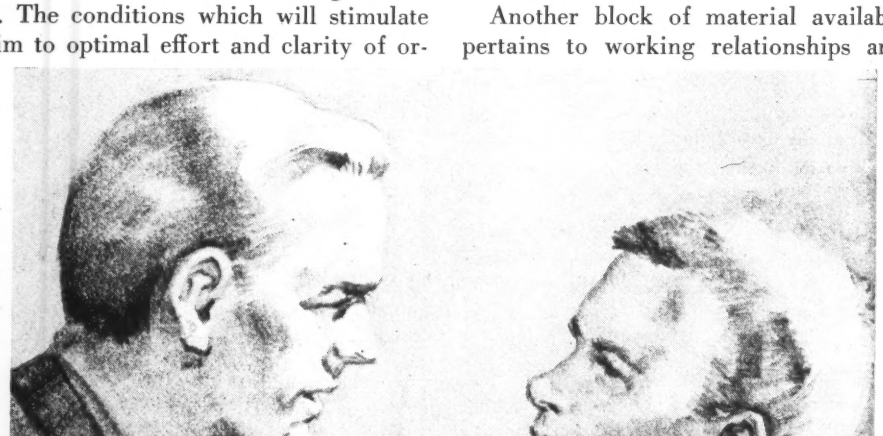
With the projective tests, then, both particular dimensions or ingredients of behavior can be judged, and the interrelationships among them can be described. For example, one man's high energy cannot be readily channeled into work without concrete incentives, in spite of his generally ambitious attitudes; another's habit of attacking obstacles is restrained in valuable channels only if he has a friendly, interested supervisor, but he becomes resentful and destructive under more rigid supervision.

From the test, a description of the person's intellectual functioning can be gained, beginning with his level of brightness. The test will tell us whether he thinks primarily in terms of facts, concepts, or objects, and whether he organizes a situation realistically and practically, or on the basis of only an attractive, obvious or minor segment of it. The conditions which will stimulate him to optimal effort and clarity of organization; the extent to which he bogs down before he reaches a solution or has one before he starts; how much skill and resourcefulness goes into his thinking; these are some of the pertinent aspects of his intelligence in work and life, which the projective test can examine. In some jobs and some men, the intellectual, inductive approach is most valuable; in others, either intuitive or conventional attitudes may be desirable.

Another complex intellectual phenomenon which can be assessed in projective tests is judgment. The psychologist gets insight into the breadth of knowledge lying behind the subject's opinions, as well as the weights which the judge assigns to them, and so can evaluate the caliber of his judgment.

In administrative responsibility, capacity to be decisive—that is, to make judgments leading to action—is important. In view of our whole society's emphasis upon independence and self-direction, few of us are willing to publicly claim indecision, or indeed to recognize it in ourselves. The projective test provides helpful material about the forces operating in a man's decisiveness and the realism he demonstrates in it. Of particular importance is the test's ability to distinguish real decisiveness from a type of energetic activity that resembles decisiveness.

Another block of material available pertains to working relationships and



Studying reactions of men to the authority system of the Army, this picture very often gave clues as to what cause for protest a man considers legitimate.

the facets of personality that will be highlighted there. Most organizations utilize both personal and impersonal authority in controlling and directing their personnel, and any given individual is likely to show somewhat different responses to each. His working relation to an actual personal superior is obviously reflected in his job, and, among administrators and executives, a constructive attitude toward supervisory people is often the *sine qua non* of success. Company goals and policies are another kind of authority, and implementing them without direct controlling supervision involves cooperation of a different sort. On the company's home ground, problems in this area are not normally strong except between widely-separated groups (e.g., management and workers separated by the hierarchy and anonymity, sales and engineering separated by interests, and often by temperaments); but *a priori* knowledge is a valuable aid in dealing with field workers of all sorts. Anyone familiar with a number of salesmen probably knows a few who do not need close checking, frequent home-office contacts and conferences to sustain their responsibility; and a few others whose personalities are such that they cannot pass by a chance to assert themselves as more powerful than the organization behind them, or in some way resist its control.

AUTHORITY AND AMBITIONS

Equally important in the functioning of an employee are the ways he uses his authority over others—how he conceives of such power, what personal satisfaction he seeks in directing and controlling, what skills he brings to bear, and how he is likely to be received as a leader. Either selecting a man for supervisory functions or training a present leader is helped by an explicit statement of his attitudes and reactions toward those of less status and responsibility.

The third dimension of working relationships revealed in the tests is that pertaining to the man's associates, peers, and co-workers. In this area, his competitiveness and his cooperation are most pertinent, since both are usually involved in a group of people with equivalent ranks. Again, however, a statement of the qualities, conditions, and motives are at least as important as an indication that one is strong, another weak. In considering a man's placement, or his duties, or his responsibility, the projective test interpretation serves by revealing his techniques of dealing with these others and his responses to their challenge.

Both one's working relationships and intellectual productivity stem from personal qualities which operate in many other life situations to guide, direct, or inhibit over long periods of time. The delineation of these individual characteristics is useful as a basis for considering problems of general placement, promotability, and long-range potentialities. Taking together the personal qualifications, intellectual characteristics and working adjustment of a man allows an employer to make more precise his considerations of how to deal with the employee and how to modify the work situation to augment productivity.

Some of the personal or individual characteristics most pertinent to the work milieu are ambition, emotional stability, conformity to social and professional standards, initiative. Each of these has somewhat different implications for performance on the job and they are in themselves rather complex characteristics.

The projective tests help us to distinguish three kinds of ambitions, three kinds of end goals that will prove satisfying to the individual. There are those goals that are primarily self-oriented, those that are social-oriented, and those that are material-oriented. Self-oriented goals are those which serve in a variety of ways to enhance the prestige of the individual in his own eyes. They are goals of self-expression, desires to prove one's integrity, to see his own ideas carried into action, to demonstrate competence. Managerial and professional positions attract persons who achieve satisfaction from such goals. Social-oriented goals are essentially those which serve to enhance the prestige of the individual in the eyes of others. They involve recognition and praise and the rewards of social approval. Position in the business world, recognized stature in the community, offices, awards, titles are the signs of the social-oriented goals. The rewards of the material-oriented are those of money and its representative, property.

It is apparent, of course, that in any one person these ambition-types are mixed and the satisfactions derived stem from all three means of satisfaction. Yet it also appears that there are concentrations of interest, that one person achieves his primary satisfaction from one or the other, with the remaining goals becoming subsidiary in his thinking. The person who is primarily concerned with increasing his income responds to different incentives than the man who is most strongly bent on a position of leadership in his community, and he handles opportunities in a different way. Equally important is the level of aspiration within each group. Financial security defined at $5,000 per year is not the same goal as $50,000, and social prestige in the suburban community is not synonymous with prestige throughout the nation or within a whole industry.

The other side of ambition lies in how it is pursued. Since, like decisiveness, most people claim to be ambitious, it is helpful to know in truth what energy, persistence, and stamina lie behind a man's convictions. A few people are able to keep their ambitions in a world of wishes, untouched by the ardors of work or possible failure. A few others are so dominated by their goals that their entire lives turn only to those ends, and no other consideration complicates a lifetime, in personal or public affairs. Between the extremes lie most of us, sacrificing an unreached goal here, implementing another there, altering our aims on occasion; repeatedly weighing concrete situations in terms of our definitions of achievement and persisting satisfactions. Assessing the energy available to, and the determination of, one's pursuit of his goals is essential to an understanding of his ambition.

Similar distinctions and qualifications may profitably be made within the other categories—emotional stability, professional conformity, initiative. Possibly, however, the example given above in the area of ambition will be sufficient to show that each of these is vital to estimating probable performance.

REVEALING THE KEY PATTERN

While none of these kinds of information is new to many business leaders, their condensation into one single assessment in this manner is an innovation of note. The great strength of the

projective tests lies in this coverage of a variety of topics in a pattern revealing the most important aspects of the individual personality in their proper relationships.

But to gain maximal use of these highly concentrated descriptions of an individual, one must see their full import and relate them to complex job situations. The first ingredient which seems to be necessary for the best use of these facts is detailed knowledge of the formal and informal aspects of the job situation.

Here it is not sufficient to know only the technical duties the person will be called upon to perform. Rather the person using the test report must assay the less formal, often less apparent interpersonal aspects. He must know the kinds of pressures others will bring to bear upon the person, whether they will tend toward cooperation or whether the new person must be a subordinate taking orders. Often one must have a good idea of the personalities of other key figures. For example, most persons asking for an assistant describe their ideal assistant as a man of initiative and independence who can carry out his duties without special direction and can contribute ideas to the problems at hand. Sometimes this is indeed the case and one then tries to find such an assistant. Not infrequently, however, a boss is looking for a man who looks like he's independent and original, but who is in reality capable only of carrying out orders without undue fuss. If the personnel manager gets him the kind of man he asked for, they'd both be displeased and the new assistant wouldn't last long. If, however, the personnel manager is aware of the real underlying demands the boss will make, he will be able to more satisfactorily select a competent assistant who is able to take orders, or one who is really more capable than this, but who is willing to work in such subordinate capacity while he learns and warrants a promotion to a spot where his independence is a more relevant factor.

A second ingredient for applying personality data to concrete situations is a knowledge of people; on this rests the consequent judgments as to whether a particular characteristic is desirable or undesirable in a specific job, and how it can be developed or mitigated. In this "dynamic" concept of both organizations and people, there are neither square pegs nor round holes, and the fitting of irregular, even asymmetric, parts calls for craftsmanship. A theoretical knowledge of the human materials and psychology is not necessary, but a practical understanding should be available to the task.

CONSTRUCTIVE REPORTS

One specific feature of the projective test reports should be specifically mentioned. Current psychological terminology is such that unless particular attention is paid to it, test reports tend to become either so obscure as to be of little use to the business leader or to become rather negative and destructive in quality. It is the experience of these writers that neither of these events need occur. Test reports can, and should, be primarily directed toward indicating the constructive use that may be made of a man's skills and abilities. While it is unquestionably necessary to point out areas of limitation, it seems to us most important to analyze the test responses in terms of positive ideas and to make every effort to reveal the ways in which a man's attributes may be constructively utilized. A secondary implication of this is also important. We are dealing with two major factors, the employer and the employed. Therefore, a crucial aspect of our consideration must be the preferences and job satisfaction of the employed as well as those of the employer. It seems to us that the most satisfactory output comes from employees properly placed and employers satisfied with productivity. This does not mean just making the employee happy, but providing him with a job environment in which his skills are fully utilized and where the personal satisfaction he achieves from competent work is maximized. Such a philosophy assumes the prerogative of every person to seek to advance himself, and of every employer to require the best of a man's skill and energy.

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Overall vs. Individual Enterprise Approach to Economic Problems

By RAYMOND T. BOWMAN

Chairman, Department of Economics,
Wharton School of Finance and Commerce,
University of Pennsylvania

The concept of "Macro-economics" and its significance for the future.

IT HAS COME to be a commonplace in modern science to recognize that the whole is almost always something more than the simple sum of all its parts. Yet the general recognition of this "Gestalt Principle" has not prevented much popular discussion from proceeding along lines which presume that an economy can be understood by merely explaining the behavior patterns of its firms and individuals independent of the conditioning factors of the overall economy.

The subject matter that has come to be called Economics or Economic Analysis had originally been called Political Economy. Throughout its history under either name its emphasis has been what might be called "overall" rather than "individual enterprise". Under the title of Political Economy it devoted more attention to the advocacy of political policy calculated to promote economic prosperity. Currently it is returning to this same point of view. This attention to the "economy" has meant, to some extent, a neglect of the study of individual enterprises and industries, and some attempt is now being made to more adequately include this neglected phase. More attention needs to be given to the study of the development and growth of enterprises, but this does not involve any less emphasis on the overall viewpoint which seeks to describe and explain the workings of the economy as a whole. Maximum progress in understanding our economy requires the continued examination of the economic behavior of individuals and of enterprises and of their effects on the economy. In addition it is equally important to understand the effect of the economy's development on the actions of business enterprises and on individuals as producing and consuming units.

PHYSICAL AND SOCIAL ORGANISMS

Yet for all of the historic emphasis of economic analysis on the operation of the economy, many men and women continue to think of the study of economics as providing a short and easy road to financial success as a business enterpriser. One reason for this personal enterprise point of view arises from the elusive character of the entity called an economy. A physical organism, like you and me, has little difficulty in recognizing the distinction between the organism and its parts. When we shift our thinking from the physical individual to social groupings like the family, the nation, or the world, the difficulty of recognizing the organic significance of such integrated groupings increases manifold. Most issues that are faced by a physical organism can be resolved easily in favor of the organism rather than its parts. As a result of the lack of easy individuation of the economy into a specific unit, it is all too easy to reason that what benefits me, my family, or my business must be a good thing for the economy as a whole. It is also easy to reason that what is detrimental to someone else, but not to me, cannot be very serious.

In order to emphasize this distinction between the whole and its parts, Professor Samuelson in a recent text lists, among others, five rather paradoxical statements.[1]

(1) "If all farmers work hard and nature cooperates in producing a bumper crop, total farm income may fall."

(2) "One man by great ingenuity in hunting a job, or by a willingness to work for less, may solve his own unemployment problem, but all cannot solve their problems in this way."

(3) "Higher prices for one industry may benefit its members but, if the prices of everything bought and sold increase in the same proportion, no one would be any better off."

(4) "Attempts of individuals to save more may lessen the total of the communities' savings."

(5) "What is prudent behavior for an individual or a single business firm may sometimes be folly for a nation or a state."

A brief consideration of each of these apparent paradoxes may not be amiss. Technically the economist explains the first one by showing that the demand for most food products is inelastic. This merely means that, other things equal, an increased output of farm products can only be sold if the price is decreased more proportionately than the increase in quantity. As a result farmers receive less for a larger crop than for a smaller one. This fact is the basis for much of the farm problem. In an industry less inherently competitive than agriculture the condition of inelastic demand would probably have led to monopolistic practices; in agriculture it has brought about government price and income support programs.

The second seeming paradox has great significance. When unemployment is rampant the advice often given is that labor should decrease its price. Now there is some truth in such advice, but hardly any insofar as the short-period effects of such price reductions are concerned. A fall in the price of labor will increase output and employment only if it increases profit expectations. A general fall in labor's price will not increase profit expectations because, by

[1] Samuelson, Paul A., *Economics: An Introductory Analysis*, McGraw-Hill, New York, 1948, p. 8.

decreasing labor's income, it reduces the sales potential of all business. Business men are the first to recognize this principle with respect to their own sales problems. They know, that when the general business outlook is bad, if everyone competitively decreases prices the total volume of sales will not increase. Merchants, therefore, often attempt to prevent such lowering of prices. This explanation must not be interpreted as denying the importance of price changes. If the price of one product can be lowered as compared with another, the sales of the now relatively cheaper product will increase. If labor's price can be lowered relatively to the price of capital facilities, then the quantity of labor used relative to capital will increase. However, this requires a long process of adjustment. In the periods covered by cyclical swings a few individuals may gain by adroit price changes, but the economy's output and employment cannot be much affected by them.

The third paradoxical item stresses the inflationary note. Individuals like the prices of their products to be high and rising. It is thus easy to conclude that high and rising prices are "good" things. But reflection makes it apparent that what each person or business wants is for their sales prices to rise but their purchase prices to stay still, or at least, not advance as much. If *all* prices rise in the same proportion no one gains. The major lesson here is that from the economy's point of view it is the quantitative output of goods and services which measures success and not an increasing money value of output. The principal function of prices is to determine the *content* of the output by stimulating the production of some product through a relative increase in their price. The quantity of other products may decline relatively because of less favorable prices in comparison. Explaining what determines the *level* of an economy's output and also the *composition* of that output are the major tasks of economic analysis.

Our fourth paradox is based on one of the most important elements in modern economic life. In a money economy if everyone tries to "save money" the economy saves nothing at all. An economy's savings consist of the goods it produces less what it consumes. In other words, savings consist of the excess of production over consumption. Now if everyone tries to spend the minimum and save the maximum, they will purchase only the barest necessities. But under such circumstances no one will want to use the money saved to buy factories, equipment, and other facilities of production, because consumers' demand doesn't warrant such expenditures. As a result such facilities will not be produced. But it is this type of production which constitutes the main elements in any saving or accumulation of things produced but not consumed. As a result the economy produces only what it consumes or perhaps, as in the early thirties, even less than it consumes. Everyone tries to save but the economy saves little, nothing, or even dis-saves. The desire to save and the willingness to invest are not the same thing, so that what people want to save and what they actually do save collectively may not be the same thing.

The fifth item on the list is very important for understanding the modern discussion of economic affairs. It points out something every business man knows but refuses to make the basis for his reasoning about public policy. The prudent thing for any individual business man to do when confronted with a slackening in the demand for his product which he cannot prevent is to lay off workers and diminish output. Now if it should so happen that this becomes a general outlook, as it often does at the beginning of a cyclical recession, then the business decline can't help but happen and perhaps become ever more severe than is necessary. If then, the government follows the same process, the emphasis on retrenchment becomes the impetus to a toboggan ride.

I would be the last to claim that individual business men should not be guided by the rule of retrenching when outlooks are poor; they must be so guided. They may take more rational forward looks and protect themselves from panic, but a free enterprise system must react to individual outlooks. The government, however, must not do this in its fiscal affairs and in its monetary policy. At such a time what it spends should be less than taxes, and its policy for the monetary system should be for easier credit and lower interest rates. Now this is not an easy policy to carry out in practice because it may be too easily interpreted as meaning spend lavishly and for anything. But this is not the policy advocated. All the policy says is to spend more than taxes and to ease credit. It can be put into effect without increasing expenditures at all. The decision as to the level of spending must depend on other factors which include the worth of the expenditures as well as the need for increasing effective demand.

But if it has always been the practice of economic analysis to emphasize the overall view of economic activity, what is meant by the "new economics" or macro-economics vs. the old economics or micro-economics?

Essentially the new economics places more emphasis on the interacting influences of certain aggregates. For instance, an increase in total national income, Mr. Keynes held, will increase individuals desires to consume, but by less than the increase in income. What people do not wish to consume they must wish to save. However, if investment opportunities do not seem to warrant the direction of this much of the increased income into capital facilities, what people want to save and enterprisers want to invest will be out of equilibrium. As a result, the level of income will fall and may remain at an amount less than required to maintain full employment. *The main idea of the analysis is to point out that the economy does not automatically adjust itself so as to provide full employment.*

ADJUSTING TO CHANGES

Micro-economics, on the other hand, placed almost all of its emphasis on the structural aspects of the economy—that is the relationship of its parts as conditioned by prices and the behavior of industries, firms, and individuals in response to changes in price relationships. Under these circumstances while change, and the frictions of adjustments to change, might allow less than full employment from time to time, the system was always tending to adjust at full employment. The only policy actions necessary under these conditions, in fact the only ones useful, were those calculated to reduce the frictions of adjustment to change. Under this system of thinking, an increase in income, if accompanied by a willingness to save more than investment outlook warranted, would be

adjusted by a falling interest rate. Lower interest rates would induce individuals to want to save less and consume more. Similarly at lower interest rates business men would wish to invest more. Thus the higher level of income could be maintained, and if all prices were flexible, the income level that would tend to prevail would always be one of full employment.

I mention these shifts in the thinking about our economy (I mean by "our" economy the economies of the countries of western civilization) because I want to bring out the idea which I think points up the essential change in nature and a resulting improved technology, largely accounts for the economic growth of the countries of western Europe and the United States.

But the passage of time taught new lessons. The very success of the main ideas was bound to lead to modifications in detail. Let me digress for a moment on one element in the logic supporting the advocacy of free enterprise. The point I wish to give special attention to is the idea of competition. I think that almost every economist would agree with me that economic activity, irrespective of type of economic institutions, is essentially competitive. Whether the economy be collectivistic or individualistic in form, it must allocate scarce resources among alternative ends, and thus these ends compete with each other. If more resources are devoted to war purposes, or any other special end, less remain for other gratifications or purposes. No economy can escape these forces of competition.

ATOMISTIC COMPETITION

However the type of competition which Adam Smith and the classists had in mind (or at least the kind they required to support their conclusions) was of a special variety. It has been called "perfect competition" or recently, in line with the times, atomistic competition. I think the latter term is more descriptive of the correct idea. This type of competition assumes that every identifiable product or service is produced by a very large number of independent producers and sold to a large number of independent purchasers. With this as the competitive setting (and no real setting ever exactly matched it) the law of the jungle promoted group interest out of individual self interest. *But remember that the law of the jungle is a cruel law.*

That this type of competition is different from the type of competition which actually prevails needs very little proof. Today, with few exceptions, each producer competes by trying to make his product appear different to the purchaser than the product of anyone else. Competition still prevails, but it is not the kind on which we can place reliance to allocate resources only to the most desired things, or to insure that the price of each product will only suffice to pay the factors producing it, the same prices they could obtain producing anything else. Under the atomistic type of competition, advertising has little, if any place. Farmer Brown would be foolish to advertise his wheat. It makes no difference to the purchaser whether he gets Brown's wheat or Jones'. He will buy a given grade of wheat at the lowest price he can get it for. Competition under these conditions is basically price competition. Therefore, Jones and Brown must both sell at the same price and if one or both cannot cover their costs, they must fail and suffer the consequences. The adjustments which simultaneously determine prices and costs are the cruel forces of the market, with the adjustments arising from the death of old or the birth of new enterprises.

The very success of the free enterprise system led to each individual or interest group trying to obtain the benefits of the system while at the same time avoiding the insecurity which the law of the jungle enforced by way of competition. The history of this development is rather clear. Firms combined and grew larger for reasons other than economy of scale. They took unto themselves more control over market forces, thus weakening reliance in the effect of competition on the proper allocation of resources. When they did not combine they accomplished the same thing by differentiating their products to secure more customer attachment. Advertising became a major industry.

Labor, as well as enterprisers, also tried to rid itself of some of the hardships of unrestrained competition. The recognized inequality of the competitive forces in governing the action of employer and worker made for government interference in the establishment of standards for working conditions, promoted standards of health in metropolitan centers, encouraged the formation of labor unions, created systems of workmen's compensation, unemployment insurance and old age and survivors insurance, as well as minimum wages.

In the area of agriculture, where the organization of production more closely fitted the idea of atomistic competition, actions were taken to bring into this industry types of controls intended to promote the security of these groups. Because of the demand for security as well as progress, less reliance was placed upon competition as an automatic regulator.

Recognizing what Alfred Marshall called a peculiarity of free labor—namely, that persons with low incomes are unable or unwilling to invest in themselves and in their children for a far-distant return, and that employers are likewise unwilling because the investment belongs to the free worker and not the investor—compulsory education at the expense of the social group became a major state function.

I sketch in these points, very inadequately, merely to emphasize the thesis that the individuals who compose an economy, business men as well as workers, have insisted, when their political institutions were democratic, on securing not only more goods and services through competitive enterprise, but also greater personal and industrial security.

SECURITY AND "CYCLES"

This tendency for greater well-being to create the desire for greater security in this well-being is even more adequately attested by the developments which contradicted the pessimistic note in the philosophy of *laissez-faire*. As per capita income increased the birth rate fell. An expanding population, when it occurred, was associated with death rates declining more than birth rates and a rising per capita income. This demand for individual security was accentuated by the cyclical instability which accompanied the growth of the advanced industrial nations. To some of us it seems fairly clear now that the cycles of economic activity, although in part the result of institutional inadequacies, were also, to a considerable extent, the way in which change permeated the system. To eliminate all fluctuations of this character would be to prevent change and the

growth and development which accompany it. I believe this—but I also recognize that men and women are demanding, and must be given greater security even if it means some sacrifice in growth. Realistically, however, they must demand both, for one is not possible without the other. Personally, I think a large measure of both is possible if we diligently seek means to both ends, rather than only one.

The main problem of individual enterprisers is to produce the goods and services demanded on the market as efficiently as possible in line with present resources and techniques, and with every effort to improve these methods. This has meant, and must continue to mean, that the individual enterpriser must still obey the old rules insofar as the institutions allow. It is not the private enterprisers function to stabilize the economy. In the development of the institutions which govern overall economic activity, private enterprisers should, of course, take a part. If I may be so bold as to suggest it, I think their efforts will be more effective if they utilize methods similar to those of the Committee for Economic Development rather than those of the United States Chamber of Commerce or the National Association of Manufacturers.

I make this comparison not out of any malice but merely as my reaction to the publications of the organizations mentioned. As I read the various pamphlets I receive from the United States Chamber of Commerce, the National Association of Manufacturers, and the Committee for Economic Development, it always seems that the former two are "pressure groups". The last one mentioned, however, seems to recognize that the economy today is a different one from the economy of the nineteenth and early twentieth century, that it is in many respects an improvement over the earlier conditions, and that some central effort, only possible through government, is necessary if we are to have continued progress and development, but with more personal and group security.

In the future, as in the past, governments are bound to play a part. There is no other way for a democratic people to control the rules of the game. This makes it clear that the administration of government must be improved. The old doctrine was that the best government was the one which governed least. So long as government could be nominal in amount, this allowed us to be calloused to governmental operations. This is no longer possible. Our new outlook should be not how much we pay for government, but how much we get in return for our payments—not directly as individuals, but as members of a body politic.

The main elements to be guarded against are the demands for security which outbalance and stop progress in production and an expanding per capita income. Sometimes we hear the claim that our production problems are over and our only problem now is to distribute our product better—this is nonsense. It is nonsense even within the narrow view of our own economy. It makes no sense at all when we realize that 13 per cent of the people of the world receive about one-half of the world's income. The major population areas of the world are without the basic means of subsistence. Lincoln said of our nation that it could not survive half free and half slave. It can be said with equal certainty that the world cannot live in peace so long as almost 90 per cent of its population is in dire need, while 10 per cent are reaping the benefits which science and enterprise can possibly bestow on all if the courage exists to try.

TOWARDS BALANCED PROGRESS

In conclusion let me state what I think are the agreed and realizable objectives of a worthwhile economy if we have courage and a forward look and are willing to let enterprise grow in an environment which demands more personal security with growing opulence. They are, first, to produce goods and services for the market as dictated by the free choices of the economy's members and in the greatest quantities that the human and other resources will permit. Second, to do this while at the same time maintaining flexibility in the composition of such goods and services in line with the changing desires of individuals, and also to maintain flexibility in the methods used so that the things desired can always be produced in the maximum amounts consistent with the resources and technology that can be developed. (These two points include full employment of resources within the limits of the desires for goods and services vs. the desires for leisure with which to enjoy them.) Third, to do these things in such a way as to encourage and assist in the promotion of a society of individuals who will gain individually when they contribute to the above objectives and in a way which will develop the capacities of individuals so as to allow the benefits of each not to be too widely different from the rewards received by others, so that all gain in the general progress without excessive inequality.

MANAGEMENT BOOKS *Received*

How to Chart Timestudy Data, by PHIL CARROLL, 323 pages, McGraw-Hill Book Company, New York City, $5.00

Wage Determination Under Trade Unions, by JOHN T. DUNLOP, 230 pages, Augustus M. Kelley Incorporated, New York City, $3.00

Climbing the Executive Ladder, by GEORGE J. KIENZLE AND EDWARD H. DARE, 247 pages, McGraw-Hill Book Co., New York City, $2.95

Private Enterprise and Governmental Planning, an Integration, by THEO SURANYI-UNGER, 389 pages, McGraw-Hill Book Co., New York City, $3.50

Mechanical Engineer's Handbook of Design and Production, edited by CARMICHAEL AND SALISBURY, 1659 pages, John Wiley & Sons, Inc., New York City, $8.50

The Science of Wealth, by J. A. HOBSON, (revised edition, by R. F. Harrod), 214 pages, Oxford University Press, 114 Fifth Avenue, New York City, $2.00

Introduction to Public Relations, by DAVE HYATT, 104 pages, New York State School of Industrial and Labor Relations, Cornell University. No charge to residents of New York, otherwise $.25. (Extension bulletin 5)

The Art of Readable Writing, by RUDOLPH FLESCH, 237 pages, Harper & Bros., N. Y. C., $3.00

The Management Bookshelf

Manpower Economics and Labor Problems by DALE YODER, McGraw-Hill Book Co., Inc., 3rd Edition, $5.00. (1950)

MR. YODER HAS MORE than revised his text, his third edition is practically a new book. New chapters have been added on; *Manpower goals and problems, Dimensions of manpower resources, Wage structures, Wage problems, Job marketing, Special problems of retirement and pensions, Problems of status, Economic implications of collective bargaining* and *Constructive industrial relations.*

World War II experience in Manpower problems and the present concept of manpower as a natural resource are the springboard from which he launches this present authoritative text. Basic is the function of society — that of the maintenance of manpower for the continuance of society itself.

As explained in the preface, no bibliography is attached to any chapter, but the numerous footnotes throughout the book give the student, or any other reader more than adequate collateral reading.

The book is interestingly written, with many illustrative cases, precise numbering of paragraphs within the chapters and therefore is easily read and understood. The questions and exercises following each chapter cover the material pertinently and well. It is a very teachable text.

This might well be included in the reference section of any Industrial Relations executive for its excellent coverage in the field.

JULIUS C. G. SEIDL
Head, Management Department
School of Business
Fordham University
New York, N. Y.

Production Planning and Control by THOMAS M. LANDY. McGraw-Hill Book Co., New York, 1950. Cloth, 6½ x 9¼, 435 pp., 117 figs., $5.50.

THIS NEW WORK is a different kind of textbook on the subject. The author has "attempted to determine the fundamental principles and laws that govern the various phases of production planning and control." The arrangement is quite clear, concise, and stripped of all the usual details. The time-honored case-method approach has been finally forsaken (except for a few in the appendix).

Going directly to the heart of the problem, considerable space (approximately 20%) is given to Product and Production Engineering. Additional space is given to the Control of Engineering Changes, a generally overlooked but important technique. More than the usual attention is also given to Tool Control, Dispatching, and Order Preparation. About one-fourth of the book, however, is devoted to Organization Planning, Abbreviations, Symbols, Terminology and Numbering Systems, which material might not be particularly helpful to the advanced student of Production Control.

The author's approach to the problem of outlining the "principles" of such a vast field is quite interesting. He has succeeded in his endeavors and in so doing, has provided a good key to control of manufacturing operations which should be of value to the student and to Management men in all industries.

RUSSEL F. HURST. B.S., C.E., M.E.
Assistant to the Vice President for Manufacturing,
Bigelow-Sanford Carpet Co., Inc.;
Divisional Director of Production,
S.A.M.

The International Association of Department Stores by H. PASDERMADJIAN, Newman Books, London, 1950. 175 pages.

THIS BOOK IS interesting from two points of view. It is an example of successful, workable international cooperation among European department stores, and again of the application of scientific management philosophy and practices.

Started in 1928, the *International Association of Department Stores* is comprised of some 9 non-competitive stores. Its object is:

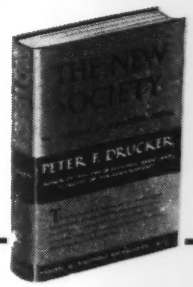
1. The pooling of information, statistics and experiences concerning the management of department stores, to the end that the excellence of management achieved by one member may become the property of all, and that economies may be effected by avoidance of costly duplication of effort.
2. The joint study of various problems, to the end that the management of the affiliated enterprises may be improved, and that progress may be more rapid, more widespread and yet less costly.

The Association was patterned after similar associations in this country, notably the *Retail Research Association* (now the *Associated Merchandising Corp.*), started in 1917. However, differences in language, in customs and national outlook were obstacles which make the accomplishment of the *International Association* truly notable. As a prerequisite to a clear interchange of ideas and information, uniform terminology and uniform accounting procedure were agreed upon and installed. In itself, this is no mean task.

Not content merely to pattern their Association after American models, the store principals and the Association's first General Secretary, *Mr. Werner Kaufman*, appreciated the importance of the contribution of scientific management to American business and industrial thought. They determined to disseminate this philosophy, supplemented by their own greater emphasis on the human factor.

One of the first projects undertaken was

(*Continued on Page* 28)



"This book is the best which has yet been written dealing with the social problems of our present industrial order."
—ALVIN H. DODD, *Honorary President, American Management Association*

PETER F. DRUCKER'S
THE
NEW SOCIETY
The Anatomy of Industrial Order

THURMAN ARNOLD says: "It is the most stimulating and original contribution to social and economic thinking I have seen this year . . . Anyone who wants to understand the problem of collectivism in our times must read this clear, dispassionate treatise."

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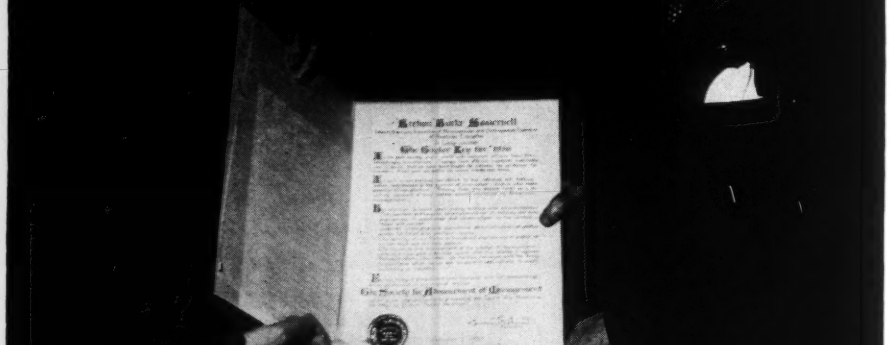
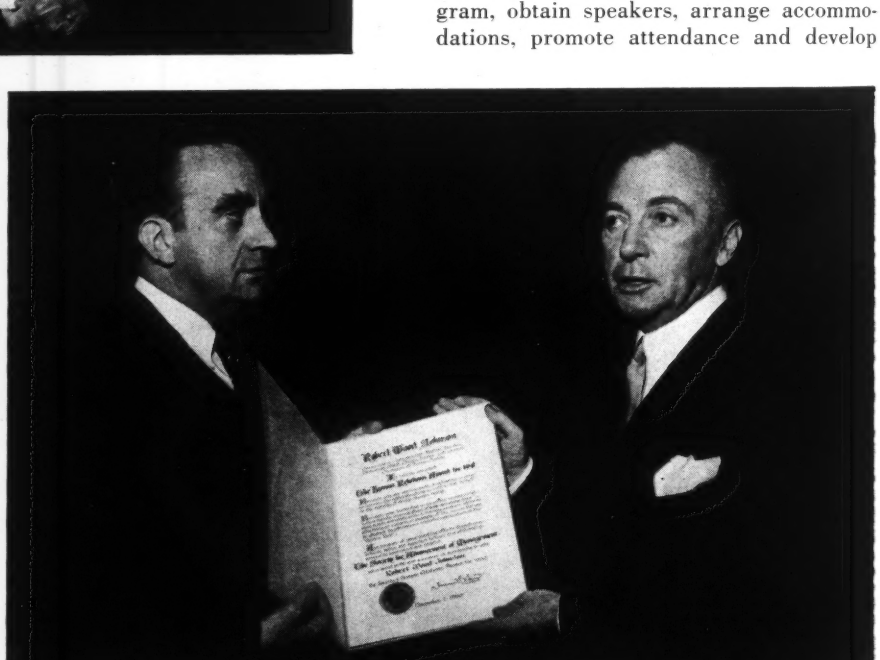
SOCIETY NEWS

Conference Highlights



Above:
General Brehon B. Somervell (right), President, Koppers Co., Inc., receiving the 1950 *TAYLOR KEY AWARD* from S.A.M. National President Dillard E. Bird.

At right: Robert Wood Johnson, Chairman of the Board, Johnson & Johnson, accepts S.A.M.'s *HUMAN RELATIONS AWARD.*



These two presentations were the center of national interest at the *SOCIETY'S ANNUAL CONFERENCE on PRINCIPLES, METHODS and TECHNIQUES* held November 2nd and 3rd at the Hotel Statler, New York City.

ANNUAL CONFERENCE BREAKS RECORDS

KEEPING IN STEP with the April 1950 Time Study Conference SAM's 1950 Annual Fall Conference chalked up another record when it drew more than 1500 management men to the Hotel Statler on November 2nd and 3rd. This attendance and the precedent-shattering revenue of approximately $21,300.00 (more than double receipts at the 1949 Annual Conference) earned the title of "the largest Annual Conference ever held in the history of the Society."

The "double-barreled" program was generously complimented for the timeliness and scope of the subjects selected. The spectacle of "Standing Room Only" in both the Georgian and Keystone rooms was a heart-warming reward for everyone connected with the myriad details of planning, promoting and conducting the Conference.

NATIONAL RECOGNITION

Comments and letters received by the National Office and members of the Society indicate that the value of the material presented was highly appreciated by the representatives of the Armed Forces, Government Services, Research Groups, Universities, corporations and individual specialists and executives who attended.

The series of special meetings inspired and directed by our national president, Mr. Dillard E. Bird, to organize the program, obtain speakers, arrange accommodations, promote attendance and develop

wide-spread interest in the Conference presented a challenging problem to an already crowded schedule. The manner in which he gave unstintingly of his time and energy will long be remembered by the Committee and the Society. He was personally responsible for obtaining the services of many of the outstanding speakers who appeared on the program.

Part of the Conference story is told by the pictures appearing in this issue, part of it is known to those who saw it in action —however the complete story of the behind-the-scenes machinery that made the Conference a smash hit can only be known to the few people who saw it grow from the very start. This group, guided and "spark-plugged" by our national president, is made up of the personnel of the National Office as follows: Marion Cusick, Dorothy Hudson, Caroline Triplett, Mignonette Brown, Mary Hayden, Ruth Wurmser, Mary Cawthon, Barbara Teed, Ruth Pisan and Lillian Blair. They deserve a sincere vote of thanks for their special attention to the countless big and little things that were done efficiently and graciously to make the Conference run smoothly. They are substantially the same "team" that made such a fine record at the Time Study Conference.

The appreciation that Mr. Bird has already expressed to the members of the Conference Committee, session chairmen and others who so generously contributed their time and services is seconded by the thanks of the Society.

NEWSPAPERS and MAGAZINES

It may be gratifying to note that the Conference won for itself considerable space in business newspapers and magazines. Besides basic coverage at length in the *New York Times* and the *Herald Tribune* a two page story with photographs appeared in *Business Week* of November 11th (pg. 31) and the December issue of *Forbes Magazine* will carry a feature article based on Conference material. A second article in *Forbes Magazine* has been scheduled for January 1951. A partial list of other publicity includes: *World Telegram and Sun, Journal of Commerce, Daily Labor Report,* Nov. 7, 1950 (BNA); *Factory, American Machinist, Mechanical Engineering, Office Management & Equipment, The Associated Press, Research Institute of America, National Foreman's Institute,* and many others.

Many inquiries have been received about availability of the Proceedings of the Conference. Advance orders are now being taken and, to insure delivery, it is suggested that orders be placed at once.

CLARENCE A. SLOCUM has been appointed to the post of Executive Director for the SOCIETY FOR ADVANCEMENT OF MANAGEMENT. Dillard E. Bird, National President of the Society, introduced Mr. Slocum at the Society's Annual Fall Banquet at the Hotel Statler, Thursday Evening, November 2, 1950.

Mr. Slocum, a Ph.D. in Business Organization and Management, has a background of business experience with General Foods and General Motors. He taught management subjects at the Ohio State University, the University of Tennessee, and Kent State. He held a commission as Lieutenant Commander in the U. S. Navy. His assignments with the Navy include Director of Officer Training, Princeton University, and Port Director, Leyte Gulf, the Phillipines. He has been active in Society affairs for many years, being credited with organizing the Knoxville, Tennessee Chapter of SAM, and student chapters at the Universities of Tennessee and Chattanooga. He belongs to: Delta Sigma Pi; Beta Gamma Sigma; Acacia.

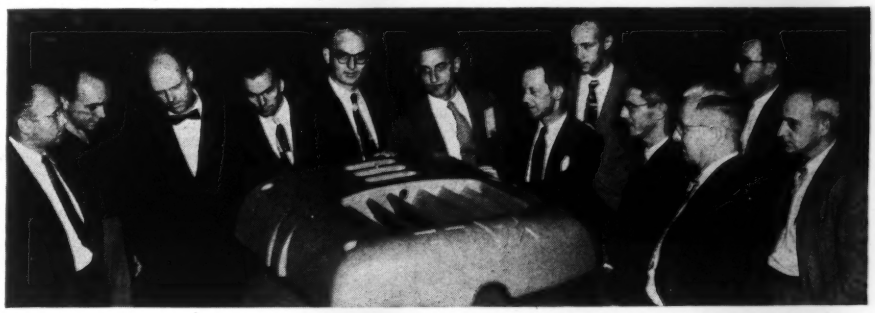
ASA SMALLIDGE KNOWLES, vice president of Cornell University, Ithaca, N. Y., has been chosen by the University of Toledo, Ohio, board of directors to be the institution's ninth president.

He is a member of the SOCIETY FOR ADVANCEMENT OF MANAGEMENT, Providence chapter, having served as national secretary, vice president and director from 1940 to 1942; the American Society of Mechanical Engineers, serving on the executive committee of its management division, and the American Society of Engineering Education. He was awarded the Taylor Key—by the SOCIETY FOR ADVANCEMENT OF MANAGEMENT for his outstanding services in the management field.

THE CHICAGO CHAPTER announces that the Third Annual Management Conference is planned for February 1 and 2, 1951. Northwestern University, as co-sponsors of this vital meeting, have made it a part of the Northwestern Centennial and will cooperate to feature prominent speakers of national renown.

The committee has chosen this problem —*"Greater Productivity"* — *"Doing More With What We Have"*—as the theme for the Conference. Andrew Pontius as General Chairman of the Conference is drawing his organization lines around a committee consisting of Joseph Towle as Program Chairman, John A. Marchese as Arrangements Chairman, and Sig Fecht in charge of publicity.

MANCHESTER CHAPTER announces its officers as follows: *President*—Charles S. Parsons, Chicopee Mfg. Corp. of N.H., Manchester; *National Director* — E. Colman Beebe, Beebe Rubber Company, Nashua; *Vice President*—David A. Gregg, Kendall-Hadley, Inc., Merrimack; *Secretary*—Thomas M. McAuley, Chicopee Mfg. Corp. of N.H., Manchester; *Treasurer*—Walter S. Little, Public Service Co. of N.H., Manchester.



Yale & Towne official explaining a method for making unit loads of heavy radiator castings, during the recent visit of the PHILADELPHIA CHAPTER.